



IBM MarketScan Research Databases

CRA Attachment: License Information

LICENSE INFORMATION

This License Information ("LI"), is an Attachment to the IBM Client Relationship Agreement ("CRA") executed by the parties and governs all licensing of IBM MarketScan® Research Databases. If the parties have not previously executed a CRA, the CRA for Programs available under the CRA family agreements at: <https://www.ibm.com/support/customer/csol/terms/?cc=us&lc=en#detail-document> applies. This LI, once signed, is effective as of the last date of signature below ("Effective Date") and governs all orders for Program Licenses. An Order Document is a Transaction Document ("TD") to this LI and the CRA and describes the Program licensed to Client and the transaction-specific terms and conditions associated with such Program (the "Order Doc"). An Order Doc is executed for each new License to the Program. Capitalized terms used in this LI have the meaning given those terms in the CRA, unless otherwise defined herein. If there is a conflict between the terms of the CRA, this LI, and the Order Doc, the terms of the Order Doc prevail over this LI and the CRA and the terms of this LI prevail over the CRA.

1. Definitions

- a. "Affiliate" means an entity that controls, is controlled by or is under common control of Client hereunder where "controls", "is controlled by", and "is under common control with" means the power to direct or cause the direction of the day-to-day management and policies of an entity, whether through the ownership of voting securities, by contract, or otherwise. Affiliates authorized by IBM to use the Program are listed in the Order Doc.
- b. "Authorized Use" has the meaning ascribed to it in each Order Doc.
- c. "Authorized User" means Client's and each authorized Affiliate's (if applicable) employees and Contingency Employees, and Third-Party Service Providers of Client who have a need to know and are trained in appropriate data security procedures for use of the Program. For purposes of the CRA, Client contractors are considered Third-Party Service Providers and Enterprise use of the Program is subject to the requirements of Section 1.a., above.
- d. "Client" means the contracting party and its Authorized Users of the Program.
- e. "Client Works" means the source code, object code algorithms, findings, developments, analytical output, and any other works of authorship created by or resulting from Client's use of the Program. Client Works shall not contain data from the Program or any other part of the Program or Documentation. For the avoidance of doubt, Client shall not modify the Program or Documentation or otherwise incorporate any portion of the Program or Documentation into another work.
- f. "Contingency Employees" means individual, temporary workers (expressly excluding workers located in any United States-sanctioned country) who provide services to Client on a full-time, part-time or project-specific basis, and (i) are either hired by Client with wages paid directly by Client or provide services to Client through a staffing agency that is under contract with Client pursuant to which such workers are paid directly by the staffing agency, and (ii) access the Program using Client-provided computers onsite at Client offices or remotely for purposes solely related to their work on behalf of Client. Any other use of the Program by Contingency Employees constitutes unauthorized use.
- g. "Documentation" means the manuals and other documentation, whether in hard copy or electronic form, provided with the Program that may be used only in support of Client's Authorized Use of the Program as described in the Order Doc. All restrictions on Client's use of the Program apply equally to Documentation.
- h. "License" means the license and other rights granted to Client in Section 2 (License Grant) of this LI.
- i. "Program" means the IBM MarketScan Research Databases licensed under this LI (collectively and any individual database), the Documentation as defined in this LI and described in the applicable Order Doc, and as further defined in the CRA.
- j. "Term" means the term of a License granted under this LI, as specified in the Order Doc.
- k. "Third-Party Lessor" means any third-party vendor from whom IBM has acquired, or may acquire, the right to license, sublicense or distribute software, data, documentation or other information for use in or in connection with the Program
- l. "Third-Party Service Provider" means a third-party consultant, vendor, academic consultant, and/or contractor engaged by Client to provide services to Client, or on behalf of Client, who has entered into a separate written third-party data access agreement with IBM and Client ("Data Rider") and does not have the right to further assign or subcontract the work or access to the Program.

2. License Grant

IBM grants to Client a limited, non-exclusive, non-transferable License for the Term to access the Program only from the designated Client Facility and use the Program for the Authorized Use as set forth in the Order Doc. In any report or other publication containing analytic results based on the Program, Client shall attribute IBM as the source of the underlying data by including the following statement, unless otherwise agreed in writing by IBM: *Certain data used in this study were supplied by International Business Machines Corporation as part of one or more IBM MarketScan Research Databases. Any analysis, interpretation, or conclusion based on these data is solely that of the authors and not International Business Machines Corporation.*

Further, Client must not remove, alter or destroy any other form of copyright notice, proprietary marking, or confidential legend of IBM or any Third-Party Lessor placed upon or contained within the Program and the Documentation. Client may display and print formats, results, and text to support the Authorized Use of the Program. Notwithstanding anything to the contrary in the CRA, Client may not copy, reproduce, or duplicate the Program for its own use or third-party use, in whole or in part, except to make project-specific data subsets ("Program Subsets") for the Authorized Use, sufficient back-up copies of specific datasets made in connection with the Authorized Use to comply with Client's internal backup and retention programs, or as authorized in an executed Data Rider ("Archival Copies").



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3. Confidentiality and Ownership

The Program and Documentation are IBM Confidential Information. The parties agree that the IBM Agreement for Exchange of Confidential Information, available at: <https://www.ibm.com/support/customer/cs01/terms/?cc=us&lc=en#detail-document>, governs the obligations and rights of the parties with respect to any Confidential Information exchanged between the parties under this LI unless a separate agreement for exchange of confidential information exists between the parties, in which case that separate agreement will govern. Notwithstanding the applicable confidentiality agreement, the Program remains confidential in perpetuity. The terms of this Section 3 (Confidentiality) survive the expiration or termination of the MarketScan Agreement, as defined below.

4. Client Responsibilities and Use Restrictions

The following Client responsibilities and restrictions apply to Client's use of the Program:

4.1 Authorized Users

Client agrees that it is solely responsible for ensuring its Authorized Users' use of the Program is in accordance with the MarketScan Agreement. Client agrees to use appropriate safeguards and take all reasonable steps to protect the Program from any use, reproduction, publication, or disclosure that is not specifically authorized under the MarketScan Agreement and will report to IBM any known misuse of the Program within ten (10) calendar days of discovery.

4.2 Security

Client will host the Program and store all downloaded Program Subsets in a secure environment that maintains reasonable physical, administrative, and technical safeguards that complies with all of the same data security and privacy principles that it maintains for its own data that is of a sensitive and/or confidential nature. Upon reasonable request from IBM, Client will provide reasonably necessary materials, documents, and other information to demonstrate the appropriate security of the environment where the Program is hosted. Client must notify IBM immediately of any data security incident potentially affecting any portion of the Program.

4.3 Prohibitions on Data Linking and Re-Identification

Client and its Authorized Users will not:

- (1) re-identify, attempt to re-identify, or allow re-identification of any individual (whether a patient, beneficiary, provider, or other person) contained within the Program;
- (2) re-identify, attempt to re-identify, or allow the re-identification of, any relative(s), family, or household member(s) of such individual(s), unless required by law;
- (3) re-identify, attempt to re-identify, or allow any re-identification of the entities that are the sources of information that is included within the Program; or
- (4) aggregate or otherwise combine the Program with any other individual patient level, provider level, and/or payer level data or attempt to import into or otherwise link any data or data elements with or into the Program.

If the identity of any person, establishment, or organization is discovered inadvertently, then (a) no use will be made of this knowledge; (b) the information that would identify any person, establishment, or organization will be safeguarded or destroyed; and (c) no one else will be informed of the discovered identity.

4.4 Prohibition on State- Specific Reporting

Client is prohibited from reporting or publishing any state-specific norms/metrics for the state of South Carolina.

4.5 Prohibition on Red Book

The IBM Micromedex® RED BOOK® Database ("Red Book") licensed content may only be used as a referential look-up tool, and not for an automated claims processing system. The prices contained in Red Book are based on data reported by manufacturers. IBM has not performed any independent analysis of the actual prices paid by wholesalers and providers in the marketplace. Thus, actual prices paid by wholesalers and providers may well vary from the prices contained in this table and all prices are subject to change without notice. IBM does not warrant the accuracy of Red Book contents or the pricing information.

4.6 Prohibition on Use in Litigation

Client may not use the Program or Client Works for the purpose of any pending or anticipated litigation except to the extent reasonably necessary for Client to enforce the MarketScan Agreement. This Section 4.6 (Prohibition on Use in Litigation) survives termination or expiration of this LI.

5. Warranties

Notwithstanding anything to the contrary in the CRA, the official published specifications are as set forth in the Program Description and Specifications in the Order Doc and the Program does not include S&S.

6. Termination or Expiration

Pursuant to the terms of the CRA, termination of this LI or termination or expiration of an applicable Order Doc will automatically terminate the License(s) and Client must destroy the Program, including all IBM Confidential Information disclosed under the MarketScan Agreement, in Client's possession or control or Client's Affiliates' and Contingency Employees' possession or control



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and certify such destruction to IBM in writing. Archival Copies, summarized results, or reports from the Program as permitted under the MarketScan Agreement are not subject to such destruction.

This Order Doc, together with the CRA and LI (collectively, the “MarketScan Agreement”), constitutes the entire agreement and understanding between IBM and Client concerning the subject matter hereof, and supersedes in full all other written and oral agreements, understandings, proposals, conflicting or additional terms in purchase orders, promises and representations of the parties concerning the subject matter hereof and the terms applicable hereto.

Agreed to: UNIVERSITY OF CHICAGO (“Client”)

By Liz Ambrose Digitally signed by Liz Ambrose
Date: 2021.03.03 14:22:33 -06'00'
Authorized signature

Title: Senior Buyer

Name (type or print): Liz Ambrose

Date: 03/03/2021

Agreed to: INTERNATIONAL BUSINESS MACHINES
CORPORATION (“IBM”)

By _____
Authorized signature

Title:

Name (type or print):

Date:

Base Agreement Name: IBM Client Relationship Agreement dated April 29, 2020
Base Agreement Number:

IBM Client Number:

ORDER DOCUMENT

This Order Doc is a TD to the CRA and MarketScan Research Databases LI agreed to by the parties and describes the Program licensed to Client and the transaction specific terms and conditions associated with such Program. An Order Doc is executed for each new license to the Program. Capitalized terms used in this Order Doc have the meaning given those terms in the CRA or the LI, unless otherwise defined herein. If there is a conflict between the terms of the CRA, the LI, and this Order Doc, the terms of this Order Doc prevail over the LI and the CRA, and the terms of the LI prevail over the CRA.

1. Program Description and Specifications

Under this Order Doc, IBM agrees to license Client to use the Program consisting of the following:

- MarketScan Commercial Database, data years 2003 – 2019
- MarketScan Medicare Supplemental Database, data years 2003 – 2019
- MarketScan Lab Database, data years 2008-2015
- MarketScan Health and Productivity Database, data years 2005-2010

Commercial Database

The MarketScan Commercial Database contains the healthcare experience of privately insured individuals. Coverage is provided under a variety of fee-for-service, fully capitated, and partially capitated health plans, including preferred provider organizations, point of service plans, indemnity plans, and health maintenance organizations.

The data that make up the Commercial Database are stored in the following tables:

- *The Inpatient Admissions Table* contains records that summarize information about a hospital admission. IBM Watson Health constructs this table after identifying all of the service records associated with an admission (e.g., the hospital claims, physician claims, surgeon claims, and claims from independent labs). Similar information (such as payments for professional services) is then summed across the claims. The admission record includes the principal procedure and diagnosis, Major Diagnostic Category, and Diagnosis-Related Group. It also includes all diagnoses and procedures (up to 14 each) found on the service records.
- *The Inpatient Services Table* contains the individual claims that are summed to create the inpatient admission records. An admission identifier on both the Inpatient Admissions and the Inpatient Services Tables identifies the claims that make up each admission record.
- *The Outpatient Services Table* comprises services that were rendered in a doctor's office, hospital outpatient facility, or other outpatient facility.
- *The Facility Header Table* contains the header records from facility claims for inpatient and outpatient services, including full diagnosis information.
- *The Outpatient Pharmaceutical Claims Table* contains outpatient prescription drug data from multiple sources, including mail-order data. Each record includes National Drug Code (NDC), therapeutic class, ingredient cost, dispensing fee, copayment, deductible, total gross payment, and other data elements.
- *The RED BOOK™ Supplement Table* contains RED BOOK variables that enhance prescription drug analyses. These variables are linked to the Outpatient Pharmaceutical Claims Table by NDC.
- *The Annual Enrollment Summary Table* provides a single record per year for each enrollee, showing enrollment start and end dates and, for some demographic variables, the most prevalent demographic and plan information; for other variables, monthly values are included.
- *The Enrollment Detail Table* provides a single record per month of enrollment for each enrollee, with detailed demographic information.

Medicare Supplemental Database

The MarketScan Medicare Supplemental Database contains the healthcare experience of individuals with Medicare supplemental insurance paid for by employers. Both the Medicare-covered portion of payment (represented as Coordination of Benefits Amount, or COB) and the employer-paid portion are included in this database. The tables that make up the Medicare Supplemental Database are the same as those that make up the Commercial Database.

Client's rights and obligations relative to use of the Program (all data years) is governed by the Agreement as defined below.

MarketScan Lab Database

The MarketScan Lab Database adds laboratory results to the data elements contained in the Commercial and Medicare Supplemental Databases. The tests for which results are available include hematocrit, glucose random, hemoglobin A1C, potassium serum, creatinine serum, sodium serum, BUN, cholesterol total serum, triglyceride, HDL cholesterol, LDL cholesterol, and calcium serum.

Health and Productivity Management Database

The MarketScan Health and Productivity Management Database contains workplace absence, short- and long-term disability (STD, LTD), and workers' compensation (WC) data, which can be linked to medical and pharmacy utilization data from large United States employers. Not all data contributors contribute all types of productivity data.

The Health and Productivity Management Database contains the following tables, which can be linked to the medical, drug, and enrollment tables in the MarketScan Commercial Database:

- *The Eligibility Table* contains a series of yearly eligibility flags, which enable users to determine when employees were eligible to incur absence, STD, LTD, and WC experience in the Health and Productivity Management Database. This table also provides information on how often the employer reports absences (daily, weekly, biweekly, or monthly) and whether the employer distinguishes sick leave from other absence types.
- *The Absence Table* contains time-reporting records for individual employees, collected through employer payroll systems. The table allows users to determine when employees were out of work, number of hours out, and the reason for the absence.
- *The Short-Term Disability Table* contains case records collected by employers who offer STD benefits to their employees. The table includes case dates, payment data, and clinical information.
- *The Long-Term Disability Table* contains case records collected by employers who offer LTD benefits to their employees. The table includes case dates, payment data, and clinical information. (LTD data is available for 2008 and later.)
- *The Workers' Compensation Table* contains case-level information, including date(s) employee was absent from work, payment fields, and information describing the nature of the WC case.

2. License Grant

For purposes of the License Grant section in the LI, "Authorized Use" means analysis and creation of Client Works for Client's internal business operations and for internal use only (other than publishing Client Works in peer-reviewed journals). The Authorized Use of the Program is limited to intramural (academic) sponsored research. Use of the Program is further limited to studies conducted by faculty and research staff at the Client's Center for Health and the Social Sciences ("CHeSS" or "Center"); Department of Medicine ("Department"), Devin G. Pope, Associate Professor at the Client's Booth School of Business, to support research projects under the same license terms as the CHeSS group; Bradley Shapiro, Assistant Professor at the Client's Booth School of Business to support research projects under the same license terms as the CHeSS group.

Only Client full-time and part-time employees of the above-stated Center and Department who have a need to know and are properly trained in all Client data security procedures are considered Authorized Users of the Program. Access to the Program by any other researchers outside of the University requires prior written approval from IBM. Data access is not permitted by students working on student projects or by researchers in other associated institutions who are not Client's staff.

Use of the licensed Program to support research by qualified Ph.D. Client is authorized to permit Program access to students working on PhD dissertations following the guidelines and procedures noted below:

- Qualified PhD students must submit a request to use the Program for their dissertation using the form provided as Attachment A to this Order Doc along with a short thesis summary identifying approach and methodologies.
- Dissertation Research utilizing the Program must be approved by the student's university sponsor and by IBM via separate written amendment before access for this use is permitted.
- All student research requiring the use of enrollee level or claims level Program data must be completed while the PhD student is enrolled at (or governed by some legal agreement with) Client.
- Client and student shall share the completed dissertation with IBM.
- The fee for each student dissertation data use is \$1,000. Client shall pay this fee to IBM upon execution of an applicable amendment. For the license period of January 1, 2021 - December 31, 2021, IBM will waive these fees for up to five (5) instances of approved dissertation data use after which the \$1,000 will be imposed.

3. Term

The Term for access to and use of the Program is through December 31, 2021.

4. Client Facility

The Program is licensed to Client for access in and from the Client environment located at the Client's office(s) listed directly below (collectively "Client Facility") or on the following IBM approved third party platforms:

- IBM Cloud
- Amazon Web Services cloud platform
- Microsoft Azure cloud platform
- Cyxtera
- Google (provided Client configures all administrative and technical controls according to Google's guidelines on HIPAA compliance)



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UOFCHICAGO-TD-002-030321

Contracts Contact Person, Data Custodian, Delivery Address and Data Storage Location:

University of Chicago, Department of Medicine
5841 S. Maryland Avenue, Mail Code 5000
Chicago, IL 60637
Attn: Andrea Flores, MA
Co-Investigator, Comprehensive Care Program, Senior Analyst
Tel: (773) 702-5993
Email: aflores@medicine.bsd.uchicago.edu

5. Affiliates

The License granted under the LI for the Program described in this Order Doc extends to the following Client Affiliates, subject to all other terms of the CRA:

None.

The above-named Affiliates, if any, have the right to use the Program and download Program Subsets as set forth in the LI, provided that Client ensures that Affiliates comply with the terms and conditions of the CRA and the LI. Client acknowledges and agrees that it is liable for any and all acts or omissions in violation of the terms of the CRA or LI by each Affiliate.

6. Delivery Format, Timing, Designated Personnel, and Documentation

6.1 Delivery Format

IBM will deliver the Program in SAS format via secure FTP. Upon delivery, the Program will remain available to Client in the outbound server for 30 days ("Transfer Time"), during which Client must transfer the Program to the Client Facility or approved third-party platform as set forth in Section 4 (Client Facility) of this Order Doc. After the Transfer Time, the Program will be deleted from the outbound server. If Client requires the Transfer Time to be extended in duration, IBM may extend the duration, subject to additional fees. Upon mutual agreement by the parties, IBM may transition delivery to a different electronic platform.

6.2 Delivery Timing

IBM will deliver the Program as available in accordance with Table 1, below.

Table 1. Deliverables and Estimated Timing

Licensed Program Component	Estimated Delivery Timing
MarketScan Commercial Database, data years 2003 – 2018	Previously delivered under written contract
MarketScan Medicare Supplemental Database, data years 2003 – 2018	Previously delivered under written contract
MarketScan Lab Database, data years 2008-2015	Previously delivered under written contract
MarketScan Health and Productivity Management Database, data years 2005-2010	Previously delivered under written contract
MarketScan Commercial Database, data year 2019	January 2021 or ten business days from contract execution
MarketScan Medicare Supplemental Database, data year 2019	January 2021 or ten business days from contract execution

6.3 Designated Personnel

Client hereby designates the key personnel listed in Section 4 (Client Facility) to coordinate the delivery of the Program. If a designated person changes, Client must provide written notice of such change to IBM.

6.4 Documentation

IBM will deliver the following Documentation to support Client's use of the Program:

- IBM MarketScan® User's Guide and Data Dictionary*
- Data quality reports, including:
 - PROC contents (layouts);
 - PROC means
 - Selected frequencies and formatted frequencies of variables
 - PROC print of sample records
- SAS format library and a list of formats and matching variables
- Media information

IBM MarketScan Research Databases
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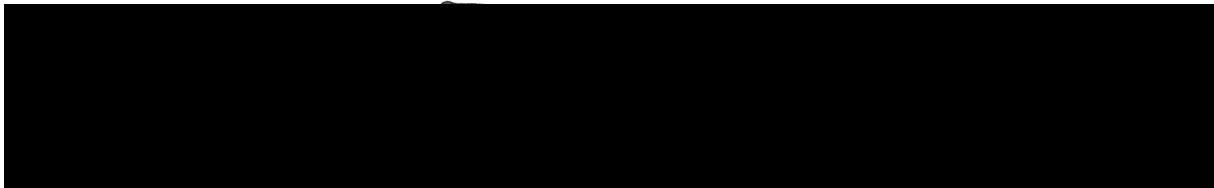
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7. Training and Support

The License Fee set forth in this document includes up to eight (8) hours of support during each year of the License Term, to address technical questions regarding the Program. IBM will provide this ad hoc support to Client via telephone or e-mail. Support and/or training services are offered and can be purchased separately from the Program license. Pricing is available upon request.

Support and/or training services are offered and can be purchased separately from the Program License. Pricing is available upon request.

8. License Fee



9. Invoicing and Payment

IBM will invoice Client for the License Fee on execution of this Order Doc. Client shall pay the invoice properly issued by IBM hereunder within thirty (30) calendar days after its receipt thereof.

IBM will send invoices to:

invoices@uchicago.edu

With a copy to:

University of Chicago, Department of Medicine
5841 S. Maryland Avenue, Mail Code 5000, Chicago, IL 60637
Attn: Andrea Flores, MA, Co-Investigator, Comprehensive Care Program, Senior Analyst
Tel: (773) 702-5993; Email: aflores@medicine.bsd.uchicago.edu

This Order Doc, together with the CRA and LI (collectively, the "MarketScan Agreement"), constitutes the entire agreement and understanding between IBM and Client concerning the subject matter hereof, and supersedes in full all other written and oral agreements, understandings, proposals, conflicting or additional terms in purchase orders, promises and representations of the parties concerning the subject matter hereof and the terms applicable hereto.

Agreed to: **UNIVERSITY OF CHICAGO ("Client")**

By _____
Liz Ambrose Digital signature by Liz Ambrose
Date: 2021.03.03 14:25:19 -0600
Authorized signature

Title: Senior Buyer

Name (type or print): Liz Ambrose

Date: 03/03/2021

Base Agreement Name: IBM Client Relationship

Agreement dated April 29, 2020

Base Agreement Number:

IBM Client Number:

Agreed to: **INTERNATIONAL BUSINESS MACHINES CORPORATION ("IBM")**

By _____
Authorized signature

Title:

Name (type or print):

Date:

Attachment A
Request for Use of Licensed Data by Ph.D. Candidate
University of Chicago

Candidate Name:	
Affiliated with what Department at University of Chicago:	
Email Address:	
Telephone:	
Doctoral Candidate Signature:	
Dissertation Title:	
Dissertation Description: (if more space is needed, please attach a separate sheet)	
Anticipated Completion Date of Dissertation:	
University of Chicago Faculty Advisor:	
Email Address:	
Telephone:	
Signature:	
Date:	
IBM Approver:	
Signature:	
Date:	
Total Fees Due to IBM:	

By providing signature on this form, both Data Licensee and Doctoral Candidate are agreeing to adhere to the terms and conditions of the Agreement and as amended. A completed signed form in PDF format shall be returned to Monica Arellano at IBM as follows for final handling and billing: monica.arellano@us.ibm.com. Fully executed copies will be maintained by IBM.