INTRODUCTION

Massachusetts is one of 12 states that has an established All-Payer Claims Database, and one of six states that releases data to non-governmental researchers.[1] The Massachusetts All-Payer Claims Database (MA APCD) contains medical, pharmacy, and dental claims submitted by commercial insurance carriers, and Medicaid/MassHealth. Insurance carriers, third party administrators, and self-insured plans all submit claims to the MA APCD, as do specialty carriers and administrators of "carved-out" services including pharmacy, mental health/substance use, dental, and vision. In addition to claims data, the MA APCD includes demographic and enrollment data for individual plan members; provider data; and insurance data including product type and coverage type. The MA APCD includes data on coverage and services for the vast majority of Massachusetts residents with public or private insurance.[2]

The MA APCD is administered by the Center for Health Information and Analysis (CHIA), a Massachusetts state agency established in 2012, as a culmination of early efforts around data collection. Prior to the establishment of CHIA, the Massachusetts Health Care Quality and Cost Council ("Council") developed a multi-payer data set in 2006 to support quality improvement and cost containment initiatives in the state. In 2009, the MA APCD was chartered with the goal of "making the existing database a central resource for all state agencies needing claims level data to support their missions," and CHIA's predecessor agency, the Division of Health Care Finance and Policy (DHCFP), began to collect claims data on behalf of the Council.[3] In 2012, DHCFP released the first data set from the MA APCD based on claims data from 2008–2010. Soon after, CHIA was established by Chapter 224 of the Acts of 2012, and responsibility for the APCD was transferred to the new agency.

Since its establishment in 2012, CHIA has released four data sets, beginning in 2013 with the release of data from 2009–2011, and building to the release, in November 2015, of data from 2009–2014. In June of 2016, CHIA will release data with dates of service from 2009–2015.

GOALS OF THE BLUE CROSS BLUE SHIELD OF MASSACHUSETTS FOUNDATION MA APCD USER SYMPOSIUM

Among states with APCDs, Massachusetts is often cited as being at the forefront in terms of the quantity and quality of data available to state agencies and non-governmental researchers. CHIA itself regularly produces informative, aggregate-level reports describing health care trends gleaned though analysis of MA APCD data. A variety of other state agencies use MA APCD data for research, policy development, and operational purposes. A number of private research projects, utilizing various data sets, are also underway. However, CHIA still faces challenges in managing the vast amounts of data collected, and opportunities exist to improve both the quality of data and the process by which non-governmental researchers may obtain it.

On November 5, 2015, the Blue Cross Blue Shield Foundation of Massachusetts (BCBSMA Foundation) hosted a symposium for non-governmental users of the MA APCD. Goals for this event included the following:

- Share highlights of private research projects that have been made possible as a result of the MA APCD. (Please see the Appendix for a list of presenters.)

- Provide an opportunity for non-governmental MA APCD users to share best practices in accessing and utilizing the data.

- Encourage discussion about future opportunities to enhance the MA APCD and its impact on data-driven research and policy development in Massachusetts.

- Inform CHIA's efforts to advance continuous improvements in the quality of data, the process through which CHIA releases data, and the process through which non-governmental researchers may obtain the data they desire.

- Foster the development of a community of MA APCD users who can share information, best practices, and recommendations to CHIA on an ongoing basis.

KEY TAKEAWAYS AND RECOMMENDATIONS

The symposium highlighted several aspects of the MA APCD and CHIA's support services that have proven effective in supporting non-governmental research efforts. One example is the steady reduction, since the initial Release 1.0 in June 2013, in the time it takes CHIA to collect and prepare data for release. Other examples include the useful Master Patient Index, which has been included in the MA APCD since Release 2.0 in December 2013, and in Release 4.0, available as of November 2015, the addition of mental health claims data from the Massachusetts Behavioral Health Partnership (MBHP).

Specific opportunities for improvement of the MA APCD were also identified. It was noted that the Centers for Medicare and Medicaid Services (CMS) has been releasing Medicare data for more than a decade, and that CMS' releases have improved over time as a result of structured feedback from data users. Symposium attendees engaged in a thoughtful discussion with the aim of helping CHIA follow in a similar path. Areas that were identified for improvement of the MA APCD included the following:

1. Expand and Improve Data Collection

Symposium participants expressed the desire for additional data elements to be collected, and for improvements to some existing data fields, to enhance and expand the breadth of research and policy issues that can be informed by this data source. Examples of new or improved data that would be useful included the following:

- **Addition of plan design information** — Researchers would like to see data fields on benefit design and network structure (e.g. tiered networks, narrowed networks and limited networks). Inclusion of plan design information would enable users to make more sense of cost and utilization data.

- **Addition of demographic information** — Users would like to see data fields for race and ethnicity.

- **Improve comprehensiveness of substance use disorder data** — Substance use treatment programs are required, under federal confidentiality law and regulations (42 CFR Part 2), to obtain patient consent prior to disclosing any patient information.[4] While well-intentioned, this requirement creates a barrier for all state APCDs in obtaining comprehensive substance use disorder treatment data. Symposium participants acknowledged that enhancements to this data may be difficult to achieve as long as the patient consent requirement remains in place.

2. Reduce Latency

Symposium participants expressed concern about the time it takes for CHIA to review, approve and expedite researchers' requests for data. In response to past feedback on this issue, CHIA has developed Limited Data Sets (LDS) that can be provided to researchers in an expedited fashion. CHIA has also been able to reduce the amount of time it takes to collect and prepare data for release, from 18 months for Release 1.0 in 2013, to just three months for the upcoming Release 5.0, which will become available in June 2016. Release 5.0 will include 2015 claims with a six-month lag.

3. Improve Usability of the Data

Changes that were suggested to improve the usability of MA APCD data included the following:

- **Addition of a Master Provider Index** — Researchers would like to have enhanced ability to link provider data to medical practices and health care systems.
- **Enhanced opportunities for outside data linkage** — Users would like to be able to link APCD data with birth/death census data and data from other state agencies.
- **Simplified eligibility files** — Participants requested that CHIA reduce the complexity and size of the eligibility file, and provide more information on MassHealth programs.
- **Creation of a sample data set** — New users might benefit from the availability of a smaller data set, perhaps containing 5% of MA APCD data, which they can use for testing purposes prior to requesting their own data.

4. Expand User Knowledge

CHIA currently offers monthly user webinars that symposium participants find helpful. Participants also suggested ideas for enhancing user knowledge, and particularly for helping new researchers access and use MA APCD data. Suggestions included the following:

- **Creation of "interest groups"** — Researchers would like to connect in small groups with other users with similar areas of interest, to share best practices around coding and algorithm development and other knowledge. Topics of particular interest included prescription drugs, disease surveillance, complex patients, methods, and social vulnerability.
- **Consider ResDAC a model for user training and support** — Symposium participants find CMS' Research Data Assistance Center (ResDAC) a helpful resource for learning to use Medicare and Medicaid data. They encouraged CHIA to examine ResDAC as a successful model on which to base future initiatives for new user training and customer service.

CONCLUSION

The BCBSMA Foundation symposium generated constructive dialogue between CHIA and non-governmental users and provided opportunity for users to share helpful information with each other. The BCBSMA Foundation looks forward to seeing implementation of these recommendations, where possible, and to the continued growth and enhancement of the MA APCD.

APPENDIX

Massachusetts All-Payer Claims Database (MA APCD) User Symposium
November 5, 2015
Westin Copley Place, Boston, Massachusetts

Agenda

Welcome
- Audrey Shelto, Blue Cross Blue Shield of Massachusetts Foundation
- Aron Boros, JD, MPP, Center for Health Information and Analysis

Current State of the MA APCD
- Michael Cocchi, Center for Health Information and Analysis

MA APCD User Panel

Moderator
- John Hsu, MD, MBA, Program for Clinical Economics and Policy Analysis, Mongan Institute for Health Policy

Panelists
- Laura Burke, MD, Harvard T.H. Chan School of Public Health
- Robin Clark, PhD, UMass Medical School
- Natalia Olchanski, MS, Tufts Medical Center
- Meredith Rosenthal, PhD, Harvard T.H. Chan School of Public Health

Open Discussion on MA APCD Opportunities
- Marilyn Schlein Kramer, MBA, Center for Health Information and Analysis

Closing
- Audrey Shelto, Blue Cross Blue Shield of Massachusetts Foundation

ENDNOTES

1. All-Payer Claims Database Council. (November 2015). www.apcdcouncil.org
2. Center for Health Information and Analysis (CHIA). (October 2015). Overview of the Massachusetts All-Payer Claims Database.
3. Ibid.
4. Wattenberg, Sarah A., MSW, *Frequently Asked Questions—Applying the Substance Abuse Confidentiality Regulations to Health Information Exchange (HIE)*, Legal Action Center for the Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services.