



NOTICE OF MEETING and AGENDA

July 11, 2017

Pursuant to the Massachusetts Open Meeting Law, G.L. c. 30A, §§ 18-25, notice is hereby given of a meeting of the Public Health Trust Fund Executive Committee. The meeting will take place:

> Tuesday, July 11, 2017 1:00 p.m. **Massachusetts Gaming Commission** 101 Federal Street, 12th Floor Public Meeting Room A & B Boston, MA 02110

- 1) Call to Order
- 2) Approval of Minutes-VOTE
- 3) FY17 Department of Public Health programmatic update
- Age and Gender Analysis from SEIGMA Baseline General Population Survey
- SEIGMA/MAGIC Annual meeting report
- Community Mitigation Fund
- 7) Public Comment
- 8) Other business reserved for matters the Chair did not reasonably anticipate at the time of posting

I certify that on this date, this Notice was posted as "The Public Health Trust Fund Executive Committee Meeting" at www.massgaming.com and emailed to: regs@secstate.m melissa.andrade@state.ma.us.

Enrique Zuniga Commissioner

Massachusetts Gaming Commission

Lindsey Cucker, Co-Chair

Associate Commissioner

Massachusetts Department of Public Health

7/7/17 at 1:00pm



Public Health Trust Fund Executive Committee (PHTFEC) Meeting Minutes

Date/Time: May 19, 2017-1:00 p.m.

Place: Massachusetts Gaming Commission

101 Federal Street, 12th Floor

Boston, Massachusetts

Present: Executive Committee

Co-Chair Stephen P. Crosby, Chairman, Massachusetts Gaming Commission

Co-Chair Lindsey Tucker, Associate Commissioner, Massachusetts Department of

Public Health

Rebekah Gewirtz, Executive Director, Massachusetts Public Health Association Brian Domoretsky, Manager, Executive Office of Public Safety and Security Michael Sweeney, Executive Director, Massachusetts State Lottery Commission

Attendees

Edward Bedrosian, Jr., Executive Director, Massachusetts Gaming Commission

Teresa Fiore, Program Manager, Massachusetts Gaming Commission Mark Vander Linden, Director of Research and Responsible Gaming,

Massachusetts Gaming Commission

Victor Ortiz, Director of Problem Gambling Services, Massachusetts Department

of Public Health

Enrique Zuniga, Commissioner, Massachusetts Gaming Commission

Jacqui Krum-Senior Vice President and General Counsel at Wynn Resorts

Development

Jed Nosal-Counsel, Brown Rudnick's Government Law and Strategies Group

Call to Order

1:01 p.m. Co-Chair Stephen Crosby called the Public Health Trust Fund Executive

Committee ("PHTFEC") meeting to order.

Approval of Minutes

Chairman Crosby moved to approve the PHTFEC minutes dated April 11, 2017.

Motion seconded by Michael Sweeney. Motion passed unanimously.

Mark Vander Linden stated that there were two small changes made to the FY18 budget which was overviewed at the last meeting. The first change was in regards to the Special Population Research Awards which were not formally presented as the research applications were not yet reviewed. The RFR received three proposals with a combined budget of \$104,880. Although this is \$4,880 over the estimated budget, Mr. Vander Linden confirmed that it could be rolled over from a \$25,000 "cushion" included within the Research and Responsible Gaming budget. The second change was in regards to the Data Transfer and Access Project. Mr. Vander Linden recommended that the \$50,000 leftover in FY17 be rolled into FY18, stating that the goal when the project initially launched was to have it completed in FY17. He went on to state that the purpose of the project is to find a method for the safe storage and maintenance of public and customizable data set.

Chairwoman Tucker asked what happened to the original \$100,000 which was set aside for this item. Mr. Vander Linden explained that half of it was moved into funding for the Massachusetts Council on Compulsive Gambling.

The Department of Public Health had recommended that a full-time epidemiologist be hired to store and maintain the data. Mr. Vander Linden stated that rolling \$50,000 into the FY18 budget would not allow for this full execution of the project as proposed by DPH. As an alternative, he stated that the (1) project could wait until the second half of FY18 in order to hire an epidemiologist as was suggested by the Department of Public Health, or (2) put the static public use data under the control of the Research Design and Analysis Subcommittee which would allow a faster launch. Under the latter suggestion, there would be still be an application process in place for public who request access to the data. Mr. Vander Linden confirmed that there are enough dollars within the Research Design and Analysis Subcommittee budget if they were to become the temporary custodians of the data. Chairman Crosby stated that the data in question is massive in size, particularly compared to the SEIGMA data.

Chairwoman Tucker stated that the Problem Gambling Services Intiatives budget prepared by Victor Ortiz was adjusted by \$80,000 in order to add prevention services targeting youth within the Region C/Plainville area.

Brian Domoretsky moved to accept the budget with changes as outlined by the Massachusetts Gaming Commission and Department of Public Health. Motion seconded by Rebekah Gewirtz. Motion passed unanimously.

Special Population Research Awards-Vote

Mr. Vander Linden stated that a \$100,000 RFP was released in March for a Special Populations study as part of the Gaming Research Agenda. The RFP specified at risk populations as identified in the SEIGMA baseline (African American/Black, Veterans, Immigrants, Hispanics and Asian Americans). Three proposals were received in response to the RFP. He further explained that the intention of the study is not to augment the General Baseline Population Study, but rather, that it is meant to build upon limited existing knowledge. After careful review by the Research Design and Analysis Subcommittee as well as the Gaming Research Advisory Committee, Mr. Vander Linden recommended that all three proposals be awarded. Chairman Crosby added that there is

reliable baseline data lacking for these groups, and as a result, the solution became to take this relatively small sum of \$100,000 and learn what we can with the limitation of full funding for baseline augmentation.

Mr. Vander Linden stated that if this special population research remains a priority, it could be made a part of the research agenda in the future particularly for those groups which did not receive a proposal. Chairwoman Tucker responded by stating that moving forward she would like an oversample of these populations within the baseline. Mr. Zuniga stated that the three populations were identified as higher risk, however, the baseline study did not give statistically significant findings so the data found in the baseline could be considered directional. Chairman Crosby reminded the Committee that the Public Health Trust Fund will be working with a larger budget in the future, so these suggestions could definitely be taken into consideration.

Mr. Sweeney stated that the proposals did not have clearly defined objectives and methodology. He questioned whether there was going to be any attempt to engage participants about the types and forms of gambling which they participate in as he feels that particularly "illegal gambling" was a missed opportunity within the SEIGMA survey. He further stated the only survey question was lopsided compared to other questions relating forms and gambling and was reflected in the SEIGMA baseline report as he knows that illegal gambling in Massachusetts, like in many other places, makes up the vast majority of gambling.

Mr. Vander Linden explained that the proposal for the study of Chinese immigrants in Boston Chinatown would target an incredibly vulnerable group and would approach data collection from a different angle. He explained that one target group of this study would be recruited from bus departure sites leaving the Connecticut casinos, while the others would be recruited through the Boston Chinatown Neighborhood Center. Ms. Gewirtz asked whether the principal investigator on the study has experience with this type of data collection and methodology. Mr. Vander Linden believed that the principal investigator, Carolyn Wong, has both the experience and relationships to successfully carry out this research. He further stated that this work places an emphasis on qualitative methodology. Chairman Crosby added that Dr. Wong is an academic researcher at the University of Massachusetts Boston, and can be reasonably comfortable that the best practices will be applied to the study, however, acknowledged that these are legitimate questions and suggested that the principal investigators sit down with the Public Health Trust Fund members to answer specific questions. Chairwoman Tucker stated that she was unsure what the objectives of the proposed studies were, and that the proposal as shared with the group provided a middle-level explanation which raised more questions than it answered. She suggested that moving forward that the right level of detail for these types of proposals needs to be determined in order for intelligent voting.

Mr. Sweeney expressed concern regarding the application proposing to study veterans, specifically how the engagement is going to occur, how questions will be asked and how it will be interpreted and presented back. He stated that given his professional background, he would only be comfortable in receiving something in writing which states that the personal information collected for this study will never be used against veterans in seeking VA benefits in the future. Ms. Gewirtz agreed that she is not comfortable with results from this study being included in personal medical records. Mr. Vander Linden stated that he would be glad to forward the actual proposals and amendments to those members who are interested, as well as returning to applicants with specific questions for clarification.

Chairwoman Tucker in addition to the aforementioned process, that she would work with veteran experts at the Department of Public Health in order to see their opinion on the topic.

Chairwoman Tucker stated that a vote was not necessary, however enough questions were raised that Mr. Vander Linden will be going back to researchers for question and will provide an update before accepting the applications. Chairman Crosby clarified that the direction is for Mr. Vander Linden to answer some questions relating to the specificity on the scope of work so that he is confident that the end result will be as useful as possible.

Process Follow-Up Items

Chairwoman Tucker stated that this was a prime time to perfect PHTFEC meeting processes and operations given that it is not fully operational. She stated that anyone should feel free to raise suggestions and provide feedback inside of outside of actual meetings. She offered six suggestions which were to (1) send all materials no later than one week in advance of the meeting, and provide more time for extensive materials (2) include executive summary for extensive materials to give attendees an overview should they not have time to go through the materials (3) add a public comment period at the end of every agenda (4) make meetings 3 hours instead of 2 (5) more complex topics may necessitate a member briefing to take place before the meeting (6) preferably switch days of the week of meeting. The group concurred with the suggestion, and Ms. Gewirtz suggested providing name placards for Executive Committee Members.

Public Health Trust Fund Update

Chairman Crosby stated that there are two policy ideas regarding the Public Health Trust Fund which have been shared internally with the Executive Committee. The first policy idea would mean that all monies dedicated to problem gambling and its totality of related issues may be put under the control of the Public Health Trust fund, including monies collected through lottery and racing. The second policy idea would mean that the Public Health Trust Fund would be formalized and codified into a statutorily driven Executive Committee.

Public Comment

2:00 p.m. No comments were made by representatives of the public. Marlene Warner suggested that next meetings where there are votes to plan for public comment before a vote is made. Chairman Crosby noted that a public comment period before every vote may take up too much time, however he suggested a general public comment period before any vote was cast. Chairwoman Tucker suggested that it would be most effective to split proposal presentations and formal votes across two meetings, allowing for public comments during the interim. Mr. Bedrosian suggested that licensees be considered during this public comment period as they are the funders.

Other Business-reserved for matter the Chair did not reasonably anticipate at the time of posting

2:03 p.m. *Having no further business, a motion to adjourn was made by Chairman Crosby. Motion seconded by Rebekah Gewirtz. Motion passed unanimously.*

List of Documents and Other Items Used

- Public Health Trust Fund Executive Committee, Notice of Meeting and Agenda dated May 19, 2017
- 2. Public Health Trust Fund Executive Committee, Meeting Minutes dated April 17, 2017
- 3. Massachusetts Gaming Commission, Memorandum dated May 19, 2017, regarding Proposed FY2018 Budget
- 4. Department of Public Health, Office of Problem Gambling Services, Memorandum dated May 19, 2017, Revision to the FY18 DPH Budget
- 5. Massachusetts Gaming Commission, Memorandum dated May 19, 2017, regarding proposed Special Population Research Awards

Department of Public Health Office of Problem Gambling Services Budget Brief – UPDATES, July 11th, 2017

• There are three initiatives that the Office of Problem Gambling Services (OPGS) is facilitating in FY 17 with a budget of \$325,000.

Strategy: Prevention and Health Promotion

Priority: Youth, Parents, and At-Risk Populations

- Plan and develop the integration of the prevention of problem gambling in conjunction with substance abuse prevention efforts and activities, targeting the following:
 - o Parent education about problem gambling and about how to reduce risk factors and increase protective factors for problem gambling and some common comorbidities.
 - o Technical assistance and education about problem gambling and related issues to community based organizations that serve high-risk populations, so that they may pass the information to their clients and congregants in a linguistically and culturally appropriate manner.
- <u>Avenue</u>: Leverage the Bureau of Substance Abuse Services (BSAS) prevention technical assistance contract to include the prevention of problem gambling in conjunction with substance abuse prevention strategies. Budget of \$100,000.
 - 1. Plan and develop strategies for the incorporation of gambling prevention within existing substance abuse coalitions
 - 2. Target coalitions within the southeast region and expand work to include gambling prevention
 - 3. Provide parent educational groups and/or prevention activities about gambling within the southeast region
 - 4. Develop collaboration with two community based organizations that serve at-risk populations and facilitate technical assistance and education about problem gambling and related issues
 - 5. Conduct evaluation of all activities and initiative for future planning and development

UPDATE:

- Plainville/Region C Planning Process executive summary and full report under review
- Prevention messages and intervention for youth and at-risk populations identified and tested.

Strategy: Infrastructure and Capacity Building

Priority: Workforce development - Community Health Workers

- Develop a training curriculum and capacity-building activities for community health workers (CHW) aimed at conducting community level interventions and disseminating problem gambling information. The initiative would focus on training existing community health workers to screen and refer people who may have a gambling disorder.
- Avenue: Collaborate with the Bureau of Community Health and Prevention (BCHAP) on contract to lead and develop CHW trainings in the southeast region in order to screen and refer people in need of problem gambling services. Budget of \$75,000.
 - 1. Develop gambling training curriculum specific to CHWs in order to build their capacity to screen and refer people who may have a gambling disorder; include screening tool and resources for referrals
 - 2. Develop community map within the southeast region (Plainville area) that outlines greatest area of need in order to develop outreach strategies

- 3. Pilot a series of trainings to CHWs in the southeast region
- 4. Conduct evaluation of FY17 piloted activities to scale for FY18

UPDATE:

- CHW and Gambling regional assessment report and executive summary under review
- Training pilot for CHWs and Gambling; consisting of curriculum development, training of 15 CHWs, evaluation, and stipends is complete.

Priority: Workforce development- BSAS providers

- Plan and develop a comprehensive workforce development initiative that will enhance the BSAS workforce in the screening, treatment, evaluation and coordination of services of gambling disorders. The initiative would target the following:
 - o Revise *Practice Guidelines for Treating Gambling Related Problems* in order for providers to have access to an evidence based framework in the treatment of disordered gambling
 - Build the capacity of the BSAS workforces within all levels of care on the *Practice* Guidelines for Treating Gambling Related Problems to enhance clinical skills in the
 treatment of disordered gambling
 - o Revise "Your First Step to Change" in order for individuals to utilize self-assessment resource to improve their personal awareness of their gambling behavior.
- Avenue: Collaborate with BSAS to identify specialized organization with gambling research, programmatic development, training, and clinical experience to: revise DPH Practice Guidelines for Treating Gambling Related Problems; revise "Your First Step to Change" self-assessment guide book; conduct regional trainings to the BSAS workforces within all levels of care on the Practice Guidelines for Treating Gambling Related Problems to enhance clinical skills in the treatment of disordered gambling. Budget of \$150,000.
 - 1. Conduct literature review to identify the latest evidence for the treatment of gambling disorders
 - 2. Revise content, concepts, activities, and measures, of "Your First Step to Change" to reflect latest evidence of disorder gambling
 - 3. Develop distribution plan of revised material to community based organizations
 - 4. Revise DPH *Practice Guidelines for Treating Gambling Related Problems* to reflect latest evidence for the treatment of gambling disorders
 - 5. Conduct and evaluate three regional trainings targeting 350 BSAS-licensed treatment agencies and an estimated 1,300 providers to build their capacity to enhance clinical skills in the treatment of disordered gambling

UPDATE:

- First Step to Change is complete and in print; distribution to MCCG and GameSense Center underway.
- State-wide training on the Practice Guidelines; complete.
- Practice Guideline webpage is under review; will be live Summer 2017.

Additional DPH Initiatives

Strategy: Infrastructure and Capacity Building

Priority: Planning and Development

a. Develop a Stakeholder Advisory Group to ensure cultural competency and community sensitivity in the planning and development of gambling related programs, initiatives, and strategies

UPDATE: First meeting complete and second meeting scheduled for the Fall 2017.

b. Work with the Massachusetts Department of Elementary and Secondary Education to include consistent problem gambling questions in the Massachusetts Youth Risk Behavior Survey and/or the Youth Health Survey (YHS)

<u>UPDATE</u>: The YHS/YRBS is currently out of the field; data analysis- September 2017.

Additional Initiatives led by and in support of the Mass Gaming Commission (MGC)

Strategy: Data Collection

Priority: Research

- a. Incorporate relevant questions into the gaming research agenda
- b. Schedule regular sessions for data review and specify who will participate
- c. Receive and incorporate data related to issues that may increase due to increased legalized gambling (such as sexual and domestic violence, sexual trafficking, suicide, substance use, obesity, traffic, asthma, occupational health concerns, neglect, and economic challenges); data sources include SEIGMA, MAGIC, established DPH data collection mechanisms, and crime data
- d. Develop a plan to store and manage gambling-related data
- e. Establish a procedure for yearly review of the security of the data
- f. Establish an electronic database or other system to securely house all data related to gambling behavior and gambling-related harms

UPDATE: Data storage initiative scheduled for FY 18

On-going work contracted with Mass Council on Compulsive Gambling

Strategy: Infrastructure and Capacity Building

Priority: State Wide Capacity Building

- A 24-hour information and referral problem gambling helpline
- The design, implementation, and facilitation of comprehensive trainings to certify clinical treatment professionals as Massachusetts Problem Gambling Specialists (MA PGS)
- A minimum of 2 regional trainings per DPH region per year (12 total regional trainings)
- A minimum of 6 on-site trainings with problem gambling services providers
- A minimum of 4 webinars related to the prevention, intervention, treatment and recovery support of problem gambling
- Provide expert consultation and technical assistance to BSAS-funded substance abuse providers regarding the assessment, referral, and treatment for clients with gambling problems
- Conduct ongoing informal needs assessment and planning in order to discern the changing needs of the problem gambling services system.

<u>UPDATE</u>: Massachusetts Council on Compulsive Gambling (MCCG) continues to meet revised outlined goals: trainings, capacity building, and helpline services.

Your First Step to Change: Gambling (2nd Edition)

During 2017, the Division on Addiction (Division) finalized an update to the Your First Step to Change: Gambling self-help workbook. The Division wrote Your First Step to Change during 2002, with support from the National Center for Responsible Gaming and the Department of Public Health via the Massachusetts Council on Compulsive Gambling. The most recent gambling-related literature and new understandings of gambling and Gambling Disorder that have emerged during the past 15 years informed the revision (e.g., DSM5). Key revisions included updating the workbook with psychometrically validated tools and including content that, over time, increasingly has been recognized as clinically important for gambling treatment and intervention (e.g., co-occurring conditions). Minor changes included revisiting available narratives, and re-writing those sections with readability and user interest in mind. The Division retained much of the structure of the first edition of Your First Step to Change, due to the fact that it completed an NIH-supported (National Institute on Drug Abuse, 1R03DA019705-01A2) randomized clinical trial of Your First Step to Change during 2012.

Citation: LaBrie, R. A., Peller, A. J., LaPlante, D. A., Bernhard, B., Harper, A., Schrier, T., & Shaffer, H. J. (2012). A brief self-help toolkit intervention for gambling problems: A randomized multi-site trial. American Journal of Orthopsychiatry, 82(2), 278-289. doi: 10.1111/j.1939-0025.2012.01157.x.

Annotation of Key Changes and Updates

- 1. Updated graphic design and layout
- 2. Replace selected items from GA 20 Questions with Brief Biosocial Gambling Screen 3-item screener, a psychometrically validated brief screen for gambling-related problems (p. 2)
- 3. Updated content for, "Understanding Gambling" (p. 3)
- 4. Updated content for, "What is problem gambling?" now, "What is Gambling Disorder" (p.3)
- 5. Updated content for, "What are signs of problem gambling?", now "What are some signs of Gambling Disorder?" (p.3)
- 6. Updated content for, "Luck" (p. 4)
- 7. Updated content for, "Do a lot of people have problems with gambling?" (p. 5)
- 8. Added section, "Is a gambling problem just a gambling problem?" (p. 6)
- 9. Added section, "Are gambling problems just about losing money?" (p. 6)
- 10. Updated content for, "Systems and Strategies" (p. 6)
- 11. Replaced adaptation of CAGE screen with adaptation of DSM5 criteria for Gambling Disorder (p. 7)
- 12. Removed general gambling screen (on p. 6 of 1st Edition)

- 13. Added question to, "Money Problems" (p. 8)
- 14. Added section and self-assessment questions, "Beyond Money" (p. 9)
- 15. Added self-assessment exercise, "Reality Check" (p. 10)
- 16. Added discussion of co-occurring mental health problems (p. 11)
- 17. Added PHQ-2 brief depression screen (p. 11)
- 18. Added GAD-2 brief anxiety screen (p. 12)
- 19. Added helpline page, using helplines available from DPH website (p. 13)
- 20. Added readiness to change exercise and explanation (p. 16-17)
- 21. Updated section, "Problem Gambling Related Website Information" (p. 24)
- 22. Updated section, "Additional Reading" (p. 25)
- 23. Updated section, "Acknowledgements" (p. 26)
- 24. Updated section, "Additional resources..." (p. 26-27)

Your First Step to CHANGE

2ND EDITION

If gambling is affecting your life and you are thinking about change, you've already taken the first step. This guide will help you understand your gambling, figure out if you need to change, and decide how to deal with the actual process of change. If you're at all concerned about your gambling, this guide is for you.



Your First Step to CHANGE

Should you decide to change, this guide can help you begin your journey. You can use the guide in the way you feel most comfortable. Complete it all at once, a little at a time, or keep it as a reference that you can read whenever you want. The guide is divided into the following three sections:

Section 1: Facts about Gambling and Gambling Disorder will explain how gambling works and how it can become a problem for some people.

Section 2: Understanding Your Gambling will help you think about how you gamble and your reasons for gambling.

Section 3: Thinking about Change will lead you through the process of change.

The first step of your journey is to figure out if you need or want to change. Answer the following three yes or no questions:

1.	During the past 12 months, have you become restless, irritable or anxious when trying to stop/cut down on gambling? Yes No
2.	During the past 12 months, have you tried to keep your family or friends from knowing how much you gambled? Yes No
3.	During the past 12 months, did you have such financial trouble as a result of your gambling that you had to get help with living expenses from family, friends or welfare? Yes No

If you answered "yes" to any of these questions, then you may want to consider making a change. If gambling is affecting you, even a little, you might want to consider gambling less. Whether you want to cut back a little, keep gambling but use some strategies to reduce harm, or eliminate gambling from your life, keep in mind that people have great success overcoming gambling-related problems. If this is your decision, this guide will help you start to make changes and identify some potential problem areas that could affect your ability to change. If you anticipate some of these potential barriers to healthy change, you'll have more success. The following sections of this guide can help. Section 1 will explain some interesting things about gambling you might not know.

Understanding Gambling

Gambling is putting something at stake on the outcome of an event before it happens. Some kinds of gambling involve some skill, like poker. Some gambling games are all chance, like slot machines. Whether the game involves some skill or not, people gamble because they hope to gain something of value. Gambling includes many things like buying a lottery or scratch ticket or playing Bingo or betting on the outcome of a sports event.



"What is Gambling Disorder?"

Gambling Disorder is gambling to the extent that it causes emotional, family, legal, financial or other problems for the gambler and the people around the gambler. Gambling Disorder can get worse over time; it also can get better. Gambling Disorder can range from mild to severe.



"What are some signs of Gambling Disorder?"

When people have a problem with gambling, they often feel like they have lost control over their gambling. They continue gambling despite bad outcomes, and crave gambling when they aren't doing it. Did you notice that whether someone has Gambling Disorder isn't just a matter of how much money he or she spends gambling?

Simply put, people with gambling problems usually spend too much time and money gambling.

Section 1:
Facts about
Gambling and
Gambling
Disorder

STREAKS

Every time you flip a coin, your chance of getting heads is 50%. This means that if you flip the coin 10 times and it comes up heads all 10 times, the chance of getting heads or tails on the 11th flip is exactly the same: 50%. The outcome of each coin toss does not affect the next. The coin does not have a memory. Although many people think that losing streaks are more likely to be followed by wins, you are never "due" to win.



LUCK

Crossing fingers, four leafed clovers, horseshoes, and blowing on dice. Many people believe these things and others can change their luck. Some people believe that playing one specific machine, or that wearing their lucky shirt, or picking a lucky number can improve their chance of winning. These things have no effect on chance. Your chance of winning is a part of the game that you are playing.

"Do a lot of people have problems with gambling?"

If gambling is becoming a problem for you, you are not alone. Research shows that about 0.2 percent to 2.5 percent of the general population might experience gambling-related problems. Rates of Gambling Disorder range from 0.1 percent to 1.8 percent. This means that, on average, out of every 100 people you meet, as many as three could have problems with their gambling behavior. Of this group, one or two people might have a

"Are certain games more likely to lead to gambling problems?"

All gambling is risky to some degree. Games that have a quick turnaround, such as video lottery, slot machines, and scratch tickets, might be more risky. However, people can develop gambling problems after playing any type of game. clinical Gambling Disorder. Taken all together, this means that as many as 10 million adults in the United States might have problems with gambling.

"What if it's my turn to win?"

Sometimes people who gamble tend to think that eventually it will be their turn to win, but it's probably not. Here's why: gambling is based on chance, probability, and randomness. If you have a 50-50 chance at winning a game, it doesn't matter how many times you have won or lost in the past. The next time you play, your chances of winning are still 50-50. Sticking around until you have a big win isn't going to help.

"Is a gambling problem just a gambling problem?"

People who have problems with gambling often have other health problems. Mental health problems might include depression, anxiety, and impulse control and substance use disorders. These problems often develop before gambling problems develop. People who have problems with gambling also are more likely to smoke, be overweight, consume excessive amounts of caffeine, and have more emergency department visits.



"Are gambling problems just about losing money?"

When people think about gambling problems, they often think about financial consequences, like losing so much money you can't pay bills. But did you know that gambling problems also could create serious problems with jobs and relationships? And gambling problems can create ripple effects. People whose loved ones have gambling problems report poor mental health, risky alcohol consumption,

economic hardship,

and arguments with

those closest to them.

SYSTEMS AND STRATEGIES

Many problem gamblers believe that they or that they have an ability to beat the odds. Even if you were able to handicap a race or count cards, there are still many factors that could change the outcome of an event. As a result, you can never be sure. Gambling is gambling—the outcome is always less than certain.

Understanding how gambling works and the dangers that are associated with gambling is an important step in your journey. This part of the guide will help you to understand your gambling patterns. Complete the questions below to see if you should examine your gambling patterns more closely. Ask yourself if you have ever...

- 1. Felt that you needed to gamble with increasing amounts of money in order to achieve the desired excitement?
- 2. Felt restless or irritable when attempting to cut down or stop gambling?
- 3. Made repeated unsuccessful efforts to control, cut back, or stop gambling?
- 4. Often felt preoccupied with gambling (e.g., having persistent thoughts of reliving past gambling experiences, handicapping or planning the next venture, thinking of ways to get money with which to gamble)?
- 5. Often gambled when feeling distressed (e.g., helpless, guilty, anxious, depressed)?
- 6. After losing money gambling, often returned another day to get even ("chasing" one's losses)?
- 7. Often lied to conceal the extent of involvement with gambling?
- 8. Jeopardized or lost a significant relationship, job, or educational or career opportunity because of gambling?
- 9. Had to rely on others to provide money to relieve desperate financial situations caused by gambling?

If you answered "yes" to one or more questions, then you might want to consider looking at your gambling more closely. Many people are not aware of all the ways that gambling can affect their lives. The exercise on the following page will help you to identify difficulties you might be facing. Answering these questions can alert you to problems that you might not have thought about.

Section 2:
Understanding
Your
Gambling

Money Problems

Another way to understand your gambling is to consider the financial impact it has on you. Many problem gamblers experience various kinds of money problems. For example, some problem gamblers are always short of cash despite adequate income, and others will borrow, pawn, or even steal to get some quick cash to gamble. Answer the following questions to see if you have found yourself in some of the same difficult money situations as problem gamblers:

- 1. Have you ever been denied credit?
- 2. Have you ever taken money out of savings, investments, or retirement accounts to gamble?
- 3. Do you find yourself frequently bothered by bill collectors?
- 4. Have you ever used grocery money or other money for necessities to gamble?
- 5. Have you ever delayed paying household bills in order to get more money for gambling?
- 6. Have you ever taken cash advances from credit cards to use for gambling?
- 7. Has your gambling caused any financial problems for you or your household?

If you answered "yes" to any of these questions, it might be a sign that your gambling has affected your financial situation. Money problems, such as these, are usually symptoms, not the causes, of gambling problems.

Beyond Money

Here are some other questions that could point out other problems you might have had because of gambling:

- 1. Have people criticized your betting or told you that you had a gambling problem, regardless of whether or not you thought it was true?
- 2. Have you felt guilty about the way you gamble or what happens when you gamble?
- 3. Did you ever lose time from work or school due to gambling?
- 4. Has gambling ever made your home life unhappy?
- 5. Have you ever gambled to escape worry, trouble, boredom, loneliness, grief or loss?
- 6. Did gambling cause you to have difficulty sleeping?

If you answered "yes" to any of these questions, it might be a sign that your gambling has affected your relationships, well being, or commitments.

At this point you still may not know if you want to change. What's important is that you have a better understanding of your gambling. The next section of this guide, Thinking about Change, will help you to think about the reasons you gamble and how to change, should you decide a change is right for you.

Gambling, even if it isn't excessive, can affect many areas of life. Sometimes it's tough to know how gambling affects you. Other times, it's quite clear—maybe even clearer than you'd like it to be! What's your reality? Give yourself a reality check of specific relationships, your productivity, and your wellness to help you see more clearly. For example, think of your most important relationship, and how you would like it to be ideally. Next, think about how that relationship is actually going. Compare what you want with the reality. How close are the two? If there's a gap or discrepancy, do you think gambling has helped create it? You can try this thought exercise for other relationships, your work, and your wellness.



My most important relationship is with	
Ideally, my relationship with	would be
In reality, my relationship with	
The difference between the ideal and the reality is: _	

Mental Health and Gambling

People with gambling problems often struggle with other problems at the same time. Other problems can make it easier to develop gambling problems. They also might make it harder to recover from gambling problems.

One of the most common co-occurring problems for people who gamble more than they should is depression. Depression is a psychiatric disorder that interferes with daily life. Some symptoms of depression are long-lasting sadness, concentration problems, disinterest, changes in sleep and weight, and more. The following brief screen will tell you whether you are at risk for depression.



Over the last two weeks, how often have you been bothered by the following problems?

- 1. Little interest or pleasure in doing things
 - 0 Not at all
 - 1 Several days
 - 2 More than half the days
 - 3 Nearly every day
- 2. Feeling down, depressed, or hopeless
 - 0 Not at all
 - 1 Several days
 - 2 More than half the days
 - 3 Nearly every day

Add your score for each item. If you scored 3 or more, you might be at risk for a depression disorder. Schedule an evaluation with a professional clinician to assess your risk.

Another common co-occurring problem for people with gambling problems is anxiety. Anxiety is a psychiatric disorder that causes excessive worrying to the extent that it interferes with everyday life, even in the absence of significant problems. Answer these two questions to see whether you might be at risk for a current anxiety disorder.



Over the last two weeks, how often have you been bothered by the following problems?

1. Feeling nervous, anxious, or on edge

Add your score for each item. If you scored 3 or more, you might be at risk for an anxiety disorder. Schedule an evaluation with a professional clinician to assess your risk.

- 0 Not at all
- 1 Several days
- 2 More than half the days
- 3 Nearly every day
- 2. Not being able to stop or control worrying
 - 0 Not at all
 - 1 Several days
 - 2 More than half the days
 - 3 Nearly every day

If you currently feel destructive toward yourself or others, this is a medical emergency and this guide is not sufficient to meet your needs. In addition, if you have suicidal thoughts, the resources of this book are not appropriate for such emergencies. You are not alone and help is available. Go to the nearest emergency room and/or call your local suicide hotline.



Hotlines

SUICIDE 1 800 274 TALK

GAMBLING 1 800 GAM 1234

DOMESTIC VIOLENCE 1 800 799 SAFE

PARENTAL STRESS 1 800 632 8188

SUBSTANCE ABUSE 1 800 327 5050

Section 3: Thinking about Change

"Do I really want to change?"

To help you make a decision about whether you want to change your gambling, it's good to think about the costs and benefits of each choice. Filling in the blocks for this exercise will help you see the costs and benefits of your gambling:

Here's an example:

Benefits of Not Gambling

- I would have more money to spend on other things.
- I would have more time to spend with people I care about.

Benefits of Gambling

- I have fun when I gamble.
- I love the feeling of excitement when I gamble.

Costs of Not Gambling

- •I will have to face responsibility.
- •I will have to somehow fill up my time.

Costs of Gambling

- •I am heavily in debt.
- I am depressed and anxious.

Now you fill in your own answers:

Benefits of Not Gambling	Benefits of Gambling
Costs of Not Gambling	Costs of Gambling

Which box has the most answers?
What does this mean to you?
Do the benefits of continuing to gamble outweigh the costs?

If you think the costs of continuing to gamble are greater than the benefits, you may want to consider changing your gambling behavior.

This is your decision.

How ready are you?

Now that you've had a chance to think about your gambling, you might decide that you want to make a change. It's important to think about how ready you are for change. Researchers have found that there are five stages of change that people move through when they want to change their relationship with gambling, using substances, or other potentially risky behavior. It's important to recognize where you are in the stages of change so you can pick appropriate goals. You'll have a better chance of reaching your goals if you recognize where you are in the stages of change and pick appropriate goals.



Please circle the option that best describes how you feel right now:

I never think about my gambling.

Sometimes I think about gambling less.

I have decided to gamble less.

I am already trying to cut back on my gambling. I changed my gambling. I now do not gamble, or gamble less than before.

If you selected:

"I never think about my gambling," you are probably in the Precontemplation stage. People in this stage usually don't feel they have a problem or don't have any interest in making a change. If a lot of people put pressure on them to change, they might try—but often without success.

"Sometimes I think about gambling less," you are probably in the Contemplation stage. People in this stage are more likely to acknowledge that they have a problem and might even be ready to start to solve it.

"I have decided to gamble less," you're probably in the Preparation stage. People in the preparation stage tend to be ready to make change. But to increase the chance of making a change successfully, it's still important to do the hard work of resolving ambivalence about change that many people feel.

"I am already trying to cut back on my gambling," you might be in the Action stage. People in this stage are taking active steps to cut back on their gambling or change some other type of behavior. It's a busy period that requires lots of commitment. If you're in this stage, you might wish to show your commitment to making change by talking about it with loved ones.

"I changed by gambling. I now do not gamble, or gamble less than before," you might be in the Maintenance stage. If you're in the maintenance stage, you're solidifying the changes you made in the earlier stages and working to avoid relapse.

Deciding on Goals

The next step in the process of change is deciding on your goals. For example:

- Do you want to stop gambling or just gamble less than you do now?
- When do you want to start to change?

Remember that change is a process and it will take time. The first three months are usually the most difficult. The period after that will be hard too, but not quite like when you began to change. Although getting through this process may seem difficult, the experience of many people shows that you can change your gambling patterns.



SOMETHING TO THINK ABOUT

Some people simply cut down on gambling, while others try to stop completely. Research suggests that cutting down on gambling can be a goal. However, a lot of people find that just cutting back on gambling is a difficult goal to keep because it can easily lead back to gambling problems.

If reducing your gambling is too hard for you, you may choose to stop gambling completely. Obviously, neither option will be easy, but just reducing your gambling might be more risky.

To change these patterns, you must first make a decision. Think about what changes you would like to make. For example, you may decide that you want to completely stop gambling in the next year, or that you want to limit your gambling activity over the next six months.

Which of the following options the box that applies:	s would you choose? Check
Stop Completely	Limit Gambling
Now write down some details about he you just chose. For example, when are specific things will you begin to do different with your current stage of change.	you planning to start? What ferently? Are your goals a good
This is your goal for change. Sign your	r name as a promise to yourself:
Signature	Date

"What can I do to handle an urge to gamble?"

You might have decided to reduce your gambling. You should know that urges are normal for a person who is reducing the amount they gamble. Urges are often very difficult to deal with, but with practice you will be able to let these feelings pass without giving in to them. You might notice that after stopping or cutting back your gambling, you feel more urges to gamble than you did before. *This is normal*. What's important is that you recognize that these urges are temporary and they will pass.



Here are a few suggestions. Focus on doing other things. Replace the things in your life that you associate with gambling with activities that will help to keep your mind off gambling. Find new enjoyable ways to spend your time. If you previously gambled to get out of bad moods or to escape from anxious feelings, try to find healthier solutions. Most importantly, think about the things that you liked to do before gambling became a part of your life.



If your urge to gamble is so great that you cannot focus on your new way of thinking or on other activities, say, "Okay, maybe I'll gamble in 10 minutes." Then wait 10 minutes. If the urge is still there, keep telling yourself to just wait 10 minutes. Find other things to do from the list you made (see page 21) for each 10-minute waiting period. Maybe call someone to help you pass the time. The urge to gamble will pass with time.

If you feel an urge to gamble, it is important to acknowledge the urge—do not ignore it. Think, "I am having an urge to gamble right now. But I know it will pass and I don't have to act on it."

f your life.			

Get involved with these old activities again; you might have forgotten just how much you enjoyed doing them. Keep this list with you at all times so that you can refer to it should you get an urge to gamble.

Now, call someone or visit a friend or family member that you can trust. Talk about your urges to gamble and how you are dealing with these feelings. Friends and family who support your decision to change will play a big role in helping you achieve your goals. Some people in your life, however, might not want you to change, and these people could potentially encourage you to gamble. If you know someone who may do this, avoid contacting that person—especially when you are experiencing an urge to gamble.

"What if I gamble and I really don't want to?"

If you find that you gamble even though you are trying to quit, you are not alone. Many people find that it takes several attempts to quit or cut down on gambling. Stopping or reducing gambling is a very difficult thing to do and you may not be able to do it the first time you try. Remember, however, that a lot of people don't even get this far. By asking for information and thinking about change, you have already begun your journey to a safer, happier, and healthier life.

If you do gamble even though you don't want to, that does not mean that you will never be able to stop. Keep trying, keep talking to people you trust, and keep asking for help. Going back to gambling doesn't make your goals any less valuable or possible.

It might also help to try some of the following:

- Attend self-help meetings such as Gamblers Anonymous®.
- Avoid going in or near places where gambling is available.
- Spend less time with people who gamble to avoid being pressured into gambling.
- Carry only the minimum amount of money that you need for the day.
- Have your paycheck direct-deposited, if possible.
- Close or have others manage your credit, debit, and ATM cards.



Hopefully this guide has helped you think about change. It is a starting point, as well as a roadmap for the process for change. Thinking about change is not always easy. Should you decide a change is right for you, you will encounter many obstacles along the way. Expect them and be prepared. Your journey may be difficult at times, but it will be well worth it.

ADDITIONAL RESOURCES

Reading this guide may have helped you to notice new things about yourself. Some of these things can be hard to deal with. Some may even be life problems that don't have anything to do with gambling. If you think that you have some other types of problems (or even gambling problems that you need more help with), you should consider getting additional support or treatment.



Problem Gambling-related Website Information

The list of websites has been compiled to help you better understand the issue of problem gambling. Some of these sites refer to research on problem gambling, some refer to self-help groups, and others are sites of organizations that focus on raising the awareness and education level of the general public around problem gambling.

Dettors Amonymous www.dettorsandnymous.org	Bettors Anonymous	www.bettorsanonymous.org
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Debtors Anonymous www.debtorsanonymous.org

Gam-Anon www.gam-anon.org

Gamblers Anonymous www.gamblersanonymous.org

Division on Addiction, Cambridge Health Alliance, a Harvard Medical School teaching hospital

www.divisiononaddiction.org

Massachusetts Council on Compulsive Gambling www.masscompulsivegambling.org

Massachusetts Department of Public Health Office of Problem Gambling Services http://www.mass.gov/eohhs/gov/departments/dph/programs/community-health/office-of-problem-gambling-services.html

National Council on Problem Gambling www.ncpgambling.org

The Brief Addiction Science Information Source www.basisonline.org

Additional Reading

If you would like to read more about problem gambling, you might find the following resources useful and interesting:

Berman, L., & Siegel, M. E. (1998). Behind the 8-ball: A Guide for Families and Gamblers. New York: Kaleidoscope Software, Inc.

Blaszczynski, A. (1998). Overcoming Compulsive Gambling: A Self-help Guide Using Cognitive Behavioral Techniques. London: Robinson Publishing Ltd.

Chin, J. (2000). A Way to Quit Gambling for Problem Gamblers. Lincoln, NE: Writers Showcase.

Custer, R. L., & Milt, H. (1985). When Luck Runs Out: Help for Compulsive Gamblers and their Families. New York: Warner Books.

Federman, E. J., Drebing, C. E., & Krebs, C. (2000). *Don't Leave It to Chance*. Oakland, CA: New Harbinger Publications, Inc.

Heineman, M. (1992). Losing Your Shirt. Minneapolis, MN: Comp Care Publishers.

Horvath, T. A. (1998). Sex, Drugs, Gambling, & Chocolate: A Workbook for Overcoming Addictions. San Louis Obispo, CA: Impact Publishers, Inc.

Humphrey, H. (2000). This Must Be Hell: A Look at Pathological Gambling. New York: Writers Club Press.

Lesieur, H. R. (1984). The Chase: The Career of the Compulsive Gambler. Cambridge, MA: Schenkman Publishing.

Moody, G. (1990). *Quit Compulsive Gambling: The Action Plan for Gamblers and Their Families*. Wellingborough, England: Thorsons Publishers.

National Endowment for Financial Education. (2000). Personal Financial Strategies for the Loved Ones of Problem Gamblers. Denver, CO: Author.

Prochaska, J. O., Norcross, J. C., & DiClemente, C. C. (1994). Changing for Good: A Revolutionary Six-stage Program for Overcoming Bad Habits and Moving your Life Positively forward. New York: Avon.

Shaffer, H. J., Martin, R. J., Kleschinsky, J. H., & Neporent, L. (2012). Change your Gambling, Change your Life: Strategies for Managing Gambling and Improving Your Finances, Relationships and Health. San Francisco: Jossey-Bass.

Svendsen, R., & Griffin, T. (1998). *Gambling: Choices and Guidelines*. (booklet). Anoka, MN: Minnesota Institute of Public Health.

ACKNOWLEDGEMENTS

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Workbooks that were developed by David Hodgins et al., and Linda and Mark Sobell et al. provided some background and information for *Your First Step to Change*.

Additional resources used for this project included:

American Psychiatric Association. (2013). Diagnostic and Statistical Manual of Mental Disorders: DSM-5 (5th ed.). Arlington, VA.: American Psychiatric Association.

Black, D. W., Shaw, M., McCormick, B., & Allen, J. (2012). Pathological gambling: Relationship to obesity, self-reported chronic medical conditions, poor lifestyle choices, and impaired quality of life. *Comprehensive Psychiatry*, doi: 10.1016/j.comppsych.2012.07.001

Blaszczynski, A., McConaghy, N., & Frankova, A. (1991). Control versus abstinence in the treatment of pathological gambling: A two to nine year follow-up. *British Journal of Addiction*, 86, 299-306.

Ciarrocchi, J. W. (2002). Counseling Problem Gamblers. New York: Academic Press.

Ewing, J. A. (1984). Detecting alcoholism: The CAGE questionnaire. *Journal of the American Medical Association*, 252(14), 1905-1907.

False beliefs and cognitions. (1999). The WAGER, 4(45).

Ferris, J., & Wynne, H. (2001). *The Canadian Problem Gambling Index: Final Report*. Canadian Centre on Substance Abuse (CCSA). http://www.jogoremoto.pt/docs/extra/TECb6h.pdf

Gamblers Anonymous. (2001). Suggestions for coping with urges to gamble.

Gebauer, L., LaBrie, R. A., & Shaffer, H. J. (2010). Optimizing DSM-IV classification accuracy: A brief bio-social screen for detecting current gambling disorders among gamblers in the general household population. *Canadian Journal of Psychiatry*, 55(2), 82-90.

Hodgins, D. C., Currie, S. R., & el-Guebaly, N. (2001). Motivational enhancement and self-help treatments for problem gambling. *Journal of Consulting and Clinical Psychology*, 69(1), 50-57.

Hodgins, D. C., & Makarchuk, K. (1998). Becoming a Winner: Defeating Problem Gambling. Calgary, Alberta, Canada: University of Calgary Press.

Kessler, R. C., Hwang, I., LaBrie, R., Petukhova, M., Sampson, N. A., Winters, K. C., & Schaffer, H. J. (2008). DSM-IV pathological gambling in the National Comorbidity Survey Replication. *Psychological Medicine*, 38(9), 1351-1360.

Kroenke, K., Spitzer, R. L., & Williams, J. B. (2003). The Patient Health Questionnaire-2: Validity of a two-item depression screener. *Medical Care*, 41, 1284-1294.

Kroenke, K., Spitzer, R. L., Williams, J. B., & Lowe, B. Anxiety disorders in primary care: Prevalence, impairment, comorbidity, and detection. *Annals of Internal Medicine*, 146(5), 317-325.

LaPlante, D. A. (2013). Responsible Drinking for Women (Electronic ed.): RosettaBooks LLC.

Marlatt, G. A., & Gordon, J. (Eds.). (1985). Relapse Prevention. New York: Guilford.

Morasco, B. J., vom Eigen, K., A., & Petry, N. M. (2006). Severity of gambling is associated with physical and emotional health in urban primary care patients. *General Hospital Psychiatry*, 28(2), 94-100.

National Endowment for Financial Education. (2000). Personal Financial Strategies for the Loved Ones of Problem Gamblers. Denver, CO: Author.

Shaffer, H. J., & Freed, C. R. (2005). The assessment of gambling related disorders. In D. M. Donovan & G. A. Marlatt (Eds.), *Assessment of Addictive Behaviors* (second ed.). New York: Guilford.

Shaffer, H. J., & Hall, M. N. (1996). Estimating the prevalence of adolescent gambling disorders: A quantitative synthesis and guide toward standard gambling nomenclature. *Journal of Gambling Studies*, 12(2), 193-214.

Shaffer, H. J., & Hall, M. N. (2001). Updating and refining meta-analytic prevalence estimates of disordered gambling behavior in the United States and Canada. *Canadian Journal of Public Health*, 92(3), 168-172.

Shaffer, H. J., Hall, M. N., & Vander Bilt, J. (1999). Estimating the prevalence of disordered gambling behavior in the United States and Canada: A research synthesis. *American Journal of Public Health*, 89(9), 1369-1376.

Shaffer, H. J., LaBrie, R., Scanlan, K. M., & Cummings, T. N. (1994). Pathological gambling among adolescents: Massachusetts gambling screen (MAGS). *Journal of Gambling Studies*, 10(4), 339-362.

Shaffer, H. J., & LaPlante, D. (2007). The treatment of gambling disorders. In G. A. Marlatt & D. M. Donovan (Eds.), *Relapse Prevention* (second ed.). New York: Guilford.

Shaffer, H. J., Martin, R. J., Kleschinsky, J. H., & Neporent, L. (2012). Change Your Gambling, Change Your Life: Strategies for Managing Gambling and Improving Your Finances, Relationships and Health. San Francisco: Jossey-Bass.

Sobell, L. C., Cunningham, J. A., Sobell, M. B., Agrawal, S., Gavin, D. R., Leo, G. I., & Singh, K. N. (1996). Fostering self-change among problem drinkers: A proactive community intervention. *Addictive Behaviors*, 21(6), 817-833.

Sobell, M. B., & Sobell, L. C. (1993). *Problem Drinkers: Guided Self-change Treatment*. New York: Guilford.

Svensson, J., Romild, U., & Shepherdson, E. (2013). The concerned significant others of people with gambling problems in a national representative sample in Sweden – a 1 year follow-up study. *BMC Public Health*, 13, 1087. Published online 2013 Nov 21. doi: 10.1186/1471-2458-13-1087

NOTES

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UNIVERSITY OF MASSACHUSETTS SCHOOL OF PUBLIC HEALTH AND HEALTH SCIENCES

TO: Public Health Trust Fund Executive Committee

FROM: Rachel A. Volberg, PhD

Principal Investigator

RE: Gambling Behavior and Problem Gambling by Age and Gender

DATE: July 11, 2017

In March 2017, Bruce Cohen advised the SEIGMA research team that the Public Health Trust Fund Executive Committee was interested to find out whether older adults represented a particularly vulnerable subgroup in Massachusetts with regard to problem gambling. At the time of this request, I was working with Danielle Venne, a UMass undergraduate enrolled with me in an independent study of gender, age and gambling using data from our 2013/2014 Baseline General Population Survey (BGPS). We agreed with Bruce and Mark Vander Linden that Danielle would finish her analysis and write-up and travel to Boston to present the results at today's meeting.

To summarize Danielle's analysis, there has been relatively little attention paid to women or older adults in the gambling research literature as these groups generally gamble less than men or young adults and are less likely to be classified as at-risk gamblers or problem gamblers. Weighted data from the BGPS were used in the present analysis with all those respondents missing information on gender and/or age dropped. The analysis focuses on differences in gambling participation, gambling frequency and rates of problem gambling in six strata, encompassing two genders (male, female) and three age groups (18-34, 35-64, 65+).

Significant gender differences were found for overall gambling participation, participation in specific gambling activities, gambling frequency and problem gambling prevalence. There were also significant differences in gambling participation, gambling frequency and problem gambling prevalence by age. Similar to many other jurisdictions, gambling participation, frequency and problem gambling prevalence are generally higher among males compared with females in Massachusetts. In contrast to other jurisdictions, adults aged 35-64 in Massachusetts had the highest rates of gambling participation in some activities as well as the highest frequency of participation. We conclude that problem gambling prevention services may best be directed toward adults aged 35-64 in Massachusetts. We plan further multivariate analyses of gender and age in the BGPS data in the future to assist in refining problem gambling prevention services n the Commonwealth.

UNIVERSITY OF MASSACHUSETTS SCHOOL OF PUBLIC HEALTH AND HEALTH SCIENCES

Gambling Behavior and PPGM by Age and Gender

Danielle Venne, Rachel Volberg, Martha Zorn

July 11, 2017

Introduction

- Gambling participation and problem gambling status for males and females ages 18-34, 35-64, and 65+
 - Past-year participation in gambling activities
 - Frequency of past-year participation
 - Problem gambler status
- Recommendations for prevention and future research



Literature Review

- Gambling participation at the population level is known to be gendered ¹⁰
- Historically women have been underrepresented in problem gambling literature ³
- Little research addresses non-problem gambling despite increases in gambling opportunities ⁵
- Gambling occurs across the life course ¹²
- Recreational gamblers generally represent the largest proportion of a given population, and can experience gambling harms as well ⁷

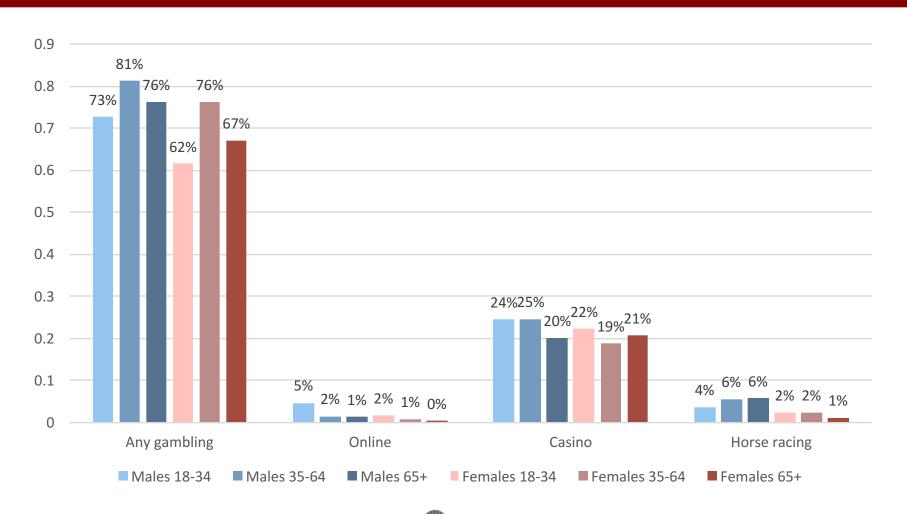


Methods

- Baseline General Population Survey
 - Variables of interest: age, gender, gambling participation, frequency of participation, and problem gambler status (PPGM)
 - -Sample size: 9,578; response rate: 36.6%
 - Missing responses to gender and age questions were excluded
 - Weighting was applied to align respondents to known MA population established by 2012 census

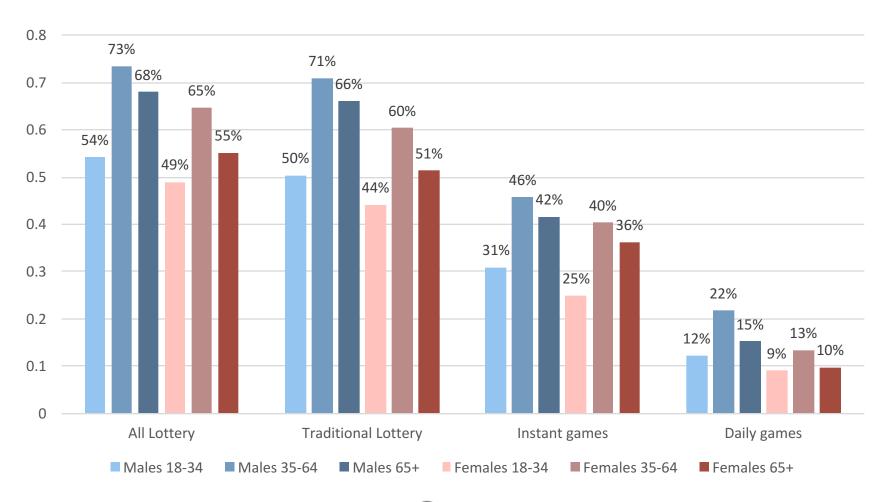


Any gambling, online, casino and horse racing participation rates



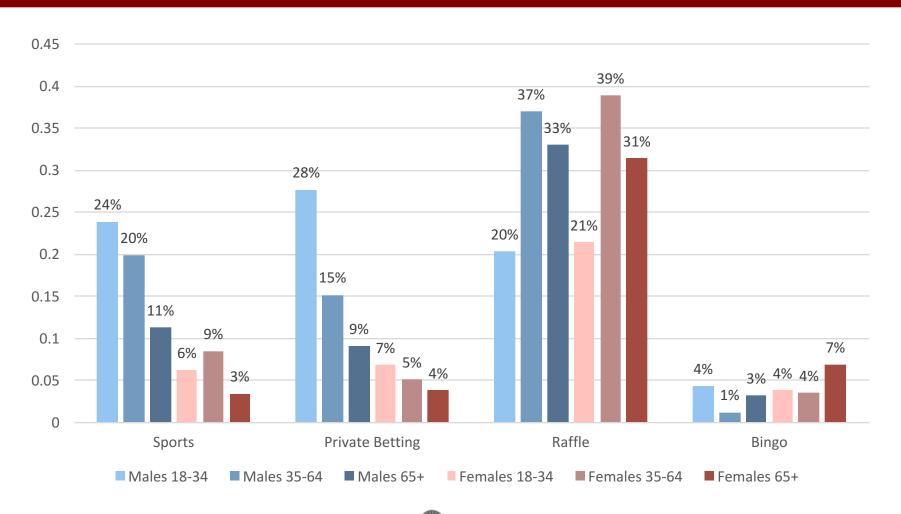


All lottery, traditional lottery, instant and daily games participation rates





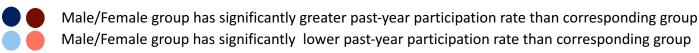
Sports, private betting, raffle, and bingo participation rates

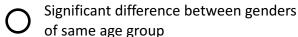




Past-year participation significant differences

	Any Gambling	Online	Casino	Horse Racing	All lottery	Traditional Lottery	Instant games	Daily games	Sports	Private Betting	Raffle	Bingo
Males 18-34	0	X							X	\otimes		
Males 35-64	\bigotimes		\otimes	0	\otimes	\otimes	X	X	0	0	•	
Males 65+	0			\otimes	0	0	•	0	0	0		
Females 18-34							• •				• •	
Females 35-64	• •				••	••					X	0
Females 65+												\otimes







Significant Gender Differences By Age

- 18-34
 - Any gambling, sports, private betting (M)
- 35-64
 - Any gambling, casino, horse racing, all lottery, traditional lottery, daily, sports, private betting (M)
 - Bingo (F)
- 65+
 - Any gambling, horse racing, all lottery, traditional lottery, daily, sports, private betting (M)
 - Bingo (F)



Significant Age Differences By Gender

Males

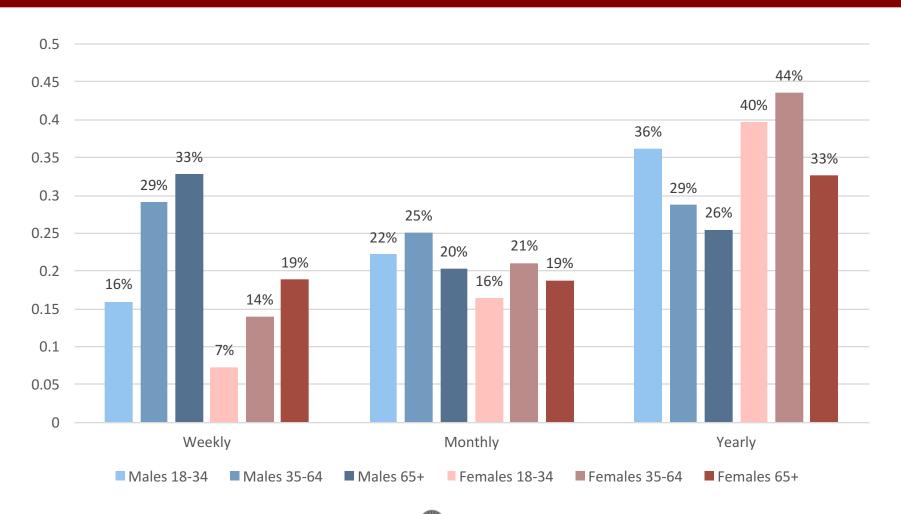
- 18-34 & 35-64
 - 18-34 > Online, private betting, bingo
 - 35-64 > Any gambling, all lottery, traditional lottery, instant, daily, raffle
- 18-34 & 65+
 - 18-34 > Online, sports, private betting
 - 65+ > Any lottery, traditional lottery, instant, raffle
- 35-64 & 65+
 - 35-64 > Daily, sports, private betting
 - 65+ > Bingo

Females

- 18-34 & 35-64
 - 18-34 >
 - 35-64 > Any gambling, all lottery, traditional lottery, instant, daily, raffle
- 18-34 & 65+
 - 18-34 >
 - 65+ > Instant, raffle
- 35-64 & 65+
 - 35-64 > Any gambling, all lottery, traditional lottery, sports, raffle
 - 65+ > Bingo



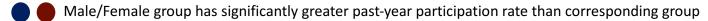
Frequency





Significant Differences in Frequency

	Weekly	Monthly	Yearly
Males 18-34	O •		•
Males 35-64	•	Х	
Males 65+	(X)		
Females 18-34	• •		
Females 35-64			(X)
Females 65+	• •		0

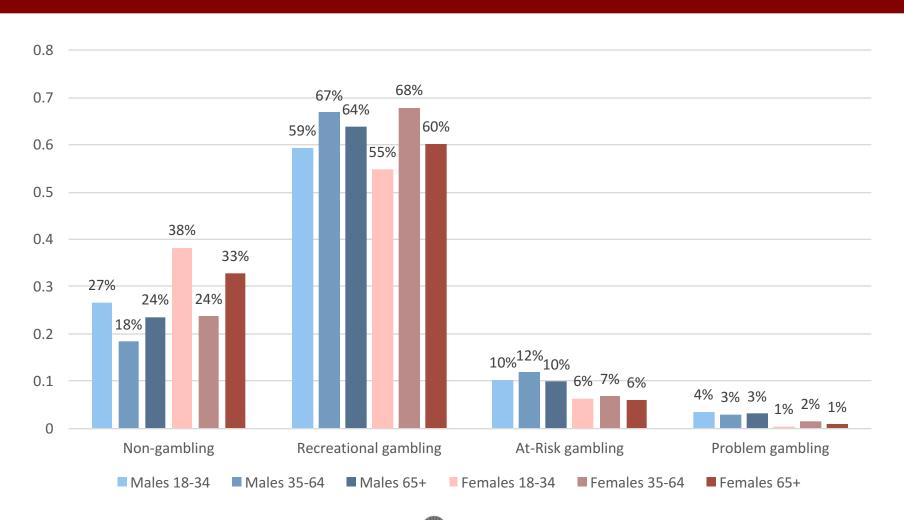


Male/Female group has significantly lower past-year participation rate than corresponding group

Significant difference between genders of same age group X - Highest participation rate amongst both genders



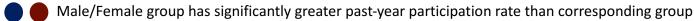
Problem Gambler Status





Significant Differences in Problem Gambler Status

	Non- Gambling	Recreational Gambling	At-risk Gambling	Problem Gambling
Males 18- 34				X
Males 35- 64			(X)	
Males 65+				
Females 18-34	×			
Females 35-64	0	X		
Females 65+	0			



Male/Female group has significantly lower past-year participation rate than corresponding group

Significant difference between genders of same age group X - Highest participation rate amongst both genders



Discussion: Past-year participation

- Males engage in any form of gambling more than females across age
- Most significant gender differences are found in those aged 35-64 and 65+
- Most significantly higher participation rates are found in those 35-64 aged in both genders



Discussion: Past-year participation

- Many significant age and gender differences exist for various lottery games
- The only significant age differences for online gambling exist in males
- The only significant gender difference for casino participation was in males aged 35-64
- Sports betting and private betting were the only activities where males participated significantly more than females across age
- Bingo was the only activity where females 35-64 and 65+ participated significantly more than males



Discussion: Frequency

Weekly

- Significantly higher rates for males than females across age
- Within both males and females there are significantly higher rates for older groups than younger group
 - For males there are no significant differences between older groups, but for females those aged 65+ have a significantly higher rate than those aged 35-64

Monthly

- No significant gender or age differences
- Yearly
 - Significantly higher rates for females than males 35-64 and 65+
 - Significantly higher rates for females 18-34 and 35-64 than those aged 65+ but no significant difference between younger groups



Discussion: Problem gambler status

- Non gamblers
 - Significantly higher rates for females than males across age
 - Significantly higher rates for males aged 18-34 than older groups
- Recreational gamblers
 - No gender differences, however a potential age effect for females
- At-risk and problem gamblers have only one significant gender difference each
 - At risk gamblers: Males 35-64
 - Problem gamblers: Males 18-34



Future Directions

- Problem gambling prevention services may be best directed toward those aged 35-64
- Further analyses, such as clustering to examine gender and age differences, would help to develop prevention recommendations



Any game, online, casino, and horse racing participation rates

		ion in any me	On	Online		Casino		Racing
	Weighted YES	% YES and 95% CI YES	Weighted YES	95% CI YES	Weighted YES	95% CI YES	Weighted YES	% YES and 95% CI YES
Males 18- 34	509,875	72.6 (67.3, 77.2)	32,740	4.7 (2.7, 8.1)	162,352	24.4 (20.1, 29.2)	24,886	3.6 (2.0, 6.3)
Males 35- 64	1,011,300	81.2 (78.7, 83.5)	18,002	1.5 (1.0, 2.2)	291,800	24.6 (21.9, 27.5)	69,716	5.6 (4.2, 7.4)
Males 65+	299,373	76.2 (73.1, 79.0)	4,965	1.3 (0.7, 2.3)	71,885	20.0 (17.3, 23.1)	22,286	5.7 (4.2, 7.6)
Females 18- 34	456,820	61.5 (57.1, 65.7)	11,527	1.6 (0.9, 2.7)	155,309	22.2 (18.8, 25.9)	16,922	2.3 (1.5, 3.5)
Females 35- 64	1,006,407	76.2 (74.0, 78.3)	10,775	0.8 (0.5, 1.4)	232,350	18.8 (16.9, 20.9)	31,036	2.3 (1.7, 3.3)
Females 65+	353,329	67.0 (63.9, 69.9)	1,627	0.3 (0.1, 1.0)	97,247	20.6 (18.0, 23.5)	5,967	1.1 (0.7, 1.8)



All lottery, traditional lottery, instant and daily games participation rates

	All Lo	ottery	Lottery		Instant		Da	aily
	Weighted YES	% YES and 95% CI YES						
Males 18- 34	380,215	54.2 (48.7, 59.7)	354,363	50.4 (44.9, 55.9)	216,543	30.9 (26.0, 36.3)	85,333	12.2 (8.9, 16.4)
Males 35- 64	914,505	73.4 (70.7, 76.0)	884,920	70.9 (68.1, 73.6)	568,616	45.7 (42.5, 49.0)	269,692	21.7 (19.1, 24.6)
Males 65+	267,075	68.0 (64.7, 71.1)	260,093	66.0 (62.7, 69.2)	162,899	41.6 (38.1, 45.1)	59,353	15.2 (12.7, 18.1)
Females 18- 34	363,697	49.0 (44.7, 53.3)	328,907	44.2 (40.0, 48.5)	184,324	24.9 (21.4, 28.7)	67,112	9.0 (7.0, 11.6)
Females 35- 64	856,081	64.7 (62.3, 67.1)	798,422	60.3 (57.8, 62.7)	532,638	40.4 (38.0, 42.8)	177,247	13.4 (11.8, 15.3)
Females 65+	290,653	55.2 (52.0, 58.4)	272,655	51.4 (48.3, 54.6)	190,600	36.2 (33.1, 39.3)	51,379	9.8 (7.9, 12.0)



Sports, private betting raffle and bingo participation rates

	Sports		Private	Private Betting		ffle	Bir	ngo
	Weighted YES	% YES and 95% CI YES	Weighted YES	% YES and 95% CI YES	Weighted YES	% YES and 95% CI YES	Weighted YES	%YES and 95% CI YES
Males 18- 34	167,616	23.9 (19.6, 28.9)	192,870	27.7 (23.0, 32.9)	142,057	20.3 (16.3, 24.9)	29,860	4.3 (2.3, 8.0)
Males 35- 64	247,208	19.9 (17.4, 22.6)	187,931	15.2 (13.0, 17.6)	459,021	37.0 (34.1, 40.1)	15,904	1.3 (0.8, 2.1)
Males 65+	44,469	11.3 (9.3, 13.7)	35,538	9.1 (7.3, 11.3)	128,147	33.0 (29.7, 36.4)	12,750	3.2 (2.2, 4.8)
Females 18- 34	46,413	6.2 (4.5, 8.5)	50,569	6.8 (5.0, 9.2)	158,504	21.4 (18.1, 25.1)	28,528	3.8 (2.6, 5.8)
Females 35- 64	111,893	8.5 (7.2, 10.0)	67,718	5.1 (4.0, 6.5)	510,830	38.9 (36.6, 41.2)	46,182	3.5 (2.6, 4.7)
Females 65+	18,124	3.4 (2.5, 4.7)	19,884	3.8 (2.8, 5.2)	164,029	31.4 (28.6, 34.4)	36,396	6.9 (5.4, 8.8)



Frequency

		Frequ	ency of Any Gan	nbling		
	Weighted Weekly	% YES; 95% CI Weekly	Weighted Monthly	% YES; 95% CI Monthly	Weighted Yearly	% YES; 95% CI Yearly
Males 18-34	109,697	16.0 (12.1, 20.9)	152,314	22.2 (17.9, 27.2)	247,863	36.2 (31.0, 41.6)
Males 35-64	355,083	29.1 (26.1, 32.3)	305,779	25.1 (22.3, 28.0)	350,438	28.7 (26.1, 31.5)
Males 65+	124,990	32.8 (29.5, 36.4)	77,345	20.3 (17.6, 23.4)	97,038	25.5 (22.5, 28.7)
Females 18-34	52,839	7.3 (5.2, 10.2)	117,801	16.4 (13.3, 19.9)	286,181	39.7 (35.7, 43.9)
Females 35-64	179,309	14.0 (12.3, 16.0)	269,394	21.1 (19.0, 23.4)	557,704	43.6 (41.2, 46.1)
Females 65+	95,050	18.9 (16.3, 21.8)	94,569	18.8 (16.4, 21.5)	163,710	32.6 (29.7, 35.6)

Problem gambler status

	Non-gambling	Recreational gambling	At-Risk gambling	Problem gambling
	% YES; 95% CI YES	% YES; 95% CI YES	% YES; 95% CI YES	% YES; 95% CI YES
Males 18-34	26.7	59.4	10.3	3.6
	(22.1, 31.9)	(53.8, 64.7)	(7.2, 14.6)	(1.9, 6.5)
Males 35-64	18.4	66.8	11.8	3.0
	(16.1, 21.0)	(63.6, 69.9)	(9.5, 14.4)	(2.0, 4.3)
Males 65+	23.6	63.8	9.9	3.1
	(20.8, 26.6)	(60.0, 66.8)	(7.9, 12.2)	(1.9, 5.0)
Females 18-34	38.3	54.8	6.4	0.5
	(34.1, 42.8)	(50.4, 59.1)	(4.5, 9.0)	(0.2, 1.4)
Females 35-64	23.8	67.9	6.8	1.5
	(21.7, 26.0)	(65.4, 70.3)	(5.4, 8.5)	(0.9, 2.6)
Females 65+	32.8	60.2	6.1	0.9
	(29.8, 35.9)	(57.0, 63.3)	(4.6, 7.9)	(0.5, 1.9)



References

- 1. Carbonneau, R., Vitaro, F., Brendgen, M., & Tremblay, R. (2015).

 Variety of gambling activities from adolescence to age 30 and association with gambling problems: A 15-year longitudinal study of a general population sample *Addiction*, *110*, 1985-1993.
- 2. Holdsworth, L., Hing, N., & Breen, H. (2012). Exploring women's problem gambling: A review of the literature *International Gambling Studies, 12*(2), 199-213.
- 3. Jarvinen-Tassopoulos, J. (2016). Gender in focus gambling as an individual, social and political problem. *Nordic Studies on Alcohol and Drugs, 33*, 3-6.
- 4. Mark, M. E., & Lesieur, H. R. (1992). A feminist critique of problem gambling research British Journal of Addiction, 87, 549-565.
- 5. Okunna, N. C., Rodriguez-Monguio, R., & Smelson, D. (2016). An evaluation of substance abuse, mental health disorders, and gambling correlations: An opportunity for early public health interventions. *International Journal of Mental Health and Addiction, 4*, 618-633.
- 6. Okunna, N. C., Rodriguez-Monguio, R., Smelson, D., Poudel, K. C., & Volberg, R. (2016). Gambling involvement indicative of underlying behavioral and mental health disorders.. *American Journal of Addiction*, 25(2)
- 7. Raisamo, S.; Makela, P.; Salonen, A.; Lintonen, T. (2014). Gambling extent and distribution of gambling harm in Finland assessed by the Problem Gambling Severity Index. *Journal of Public Health*. 25 (4)
- 8. Romild, U., Svensson, J., Volberg, R. (2016) A gender perspective on gambling clusters in Sweden using longitudinal data. Nordic Studies on Alcohol and Drugs.
- 9. Volberg, R. A., Williams, R. J., Stanek, E. J., Houpt, K. A., Zorn, M., Rodriguez-Monguio, R. (2015). *Gambling and Problem Gambling in Massachusetts:*Results of a Baseline Population Survey. Amherst, MA: School of Public Health and Health Sciences, University of Massachusetts Amherst.
- 10. Williams, R.J., Volberg, R.A., & Stevens, R. (2012). The population prevalence of problem gambling: methodological influences, standardized rates, jurisdictional differences, and worldwide trends. Report prepared for the Ontario Problem Gambling Research Centre and the Ontario Ministry of Health and Long Term Care.
- 11. Williams, R.J., Zorn, M., Volberg, R.A., Stanek, E. J., Freeman, J., Maziya, N., Naveed, M., Zhang, Y., & Pekow, P. S. (2017). *Gambling and Problem Gambling in Massachusetts: In-Depth Analysis of Predictors.* Amherst, MA: School of Public Health and Health Sciences, University of Massachusetts Amherst.
- 12. Welte, J., Barnes, G., Tidwell, M., & Hoffman, J. (2011). Gambling and problem gambling across the lifespan Journal of Gambling Studies, 27, 49-61.





UNIVERSITY OF MASSACHUSETTS SCHOOL OF PUBLIC HEALTH AND HEALTH SCIENCES

TO: Public Health Trust Fund Executive Committee

FROM: Rachel A. Volberg, PhD

Principal Investigator

RE: Summaries of 2017 Annual Meeting Presentations

DATE: July 11, 2017

This memorandum presents summaries of four presentations that were given at the 2017 SEIGMA-MAGIC annual meeting, held on the University of Massachusetts Amherst campus on June 9, 2017.

The first presentation at the annual meeting summarized results of analyses of the All-Payer Claims Data (2009-2012) condensed from two manuscripts that are currently under review, one at *Addictive Behaviors* and the other at the *Journal of Addiction Medicine*. The second presentation at the annual meeting focused on the methods and results from the first patron survey conducted in February and July 2016 at Plainridge Park Casino. The third presentation at the annual meeting provided results from economic modeling of the impacts of the first year of operations of the casino on the regional and state economy of Massachusetts. This exercise relied substantially on data from the patron survey conducted at PPC. The final presentation at the annual meeting focused on the methods employed in establishing the Massachusetts Gambling Impact Cohort (MAGIC) study, the first large gambling cohort study in the U.S. and presented results on problem gambling incidence (new cases) and transitions in gambling status between 2013/2014 and 2015 in Massachusetts.

Reports on the patron survey, the economic modeling exercise, and the cohort study are currently under review by the MGC and its experts. Once the reports are finalized, the results will be presented at open meetings of the MGC and the reports will posted on the SEIGMA and MAGIC websites, as appropriate.

Pathological Gambling and Co-occurring Mental Health and Substance Use Disorders: An Assessment of the Provision of Care by Clinician Specialty¹

BACKGROUND. Mental health and substance use disorders are prevalent among pathological gamblers. This study assessed the socio-demographic characteristics of patients with a diagnosis of pathological gambling (PG) (ICD-9 code 31231) and the prevalence of co-occurring conditions, analyzed the workforce composition and geographic distribution of healthcare providers, and estimated the likelihood of receiving care for psychiatric and substance use disorders by clinician specialty.

METHODS. Study data were derived from the Massachusetts (MA) All-Payer Claims Data, a state representative database, for the period 2009-2013. The analytical sample included commercially insured MA residents, ≥18 years who had a diagnosis of PG and sought care in MA. Claims data included outpatient visits, inpatient care and emergency room visits. Random effects probit regressions were used to estimate the likelihood of provision of care by clinician specialty controlling for type of health insurance plan. Bonferroni correction was applied to adjust for multiple testing.

RESULTS. The analytical sample included 869 patients in the study period. Prevalence of PG was highest among males (71%), aged 45-54 (27%) and enrolled in a Health Maintenance Organization (47%). The most prevalent principal diagnoses were disorders of impulse control (53.6%), episodic mood disorders (30.3%), anxiety disorders (12.6%) and psychoactive substance (10.3%) disorders. Overall, 25% of patients lived in Middlesex County; in contrast, only 21% of clinicians provided care in that county. PG as principal diagnosis was associated with a greater likelihood of receiving care from primary care providers (PCPs) (1.64; p<0.001) and psychiatrists (1.38; p<0.001). Co-occurring diagnoses of depressive disorder and major depressive recurrent affective disorder were associated with greater likelihood of receiving care from social workers (6.21 and 7.19, respectively; p<0.001) and psychologists (4.17 and 3.88, respectively; p<0.001). Substance abuse diagnosis was associated with greater likelihood of receiving care from PCPs. Not having health insurance was associated with greater likelihood of receiving care from social workers.

CONCLUSION. Psychiatric and psychoactive substance use disorders are prevalent among treatment-seeking pathological gamblers. Pathological gamblers are more likely to receive care from a PCP and psychiatrists compared with other healthcare providers. PCPs could play a key role in increasing awareness and prevention efforts.

¹ Accepted for oral presentation at the 2017 Annual Meeting & Expo of the American Public Health Association, November 2017 in Atlanta, GA. Manuscript under review at *Addictive Behaviors*.

The Economic Burden of Pathological Gambling, Co-occurring Mental Health and Substance Use Disorders²

BACKGROUND. Pathological gambling co-occurs with other mental health disorders. No studies have estimated the economic burden of pathological gambling and concurrent psychiatric and substance use disorders.

OBJECTIVES. This study assessed the cost of healthcare services and pharmaceuticals provided to patients diagnosed with pathological gambling (PG) (ICD-9 code 31231) and co-occurring mental health and substance use disorders.

METHODS. Study data were derived from the Massachusetts (MA) All-Payer Claims Data, a state representative dataset, for all healthcare settings in MA in 2009-2013. The analytical sample contained all medical and pharmaceutical claims for commercially insured MA residents ≥18 years who had health insurance, had a diagnosis of PG and sought care in MA. Healthcare cost components included outpatient, inpatient and emergency room visits. Bootstrap analysis was performed to account for skewed distribution of cost data. All costs were adjusted to constant dollars.

RESULTS. Study analytical sample included 596 patients. Most prevalent principal diagnoses were disorders of impulse control (50%), mood disorders (32%), anxiety disorders (14%) and substance use disorders (9%). The mean annual expenditures per patient on healthcare amounted to \$88,541. Patients' annual out-of-pocket expenditures totaled up to \$4,212. Prescription drug co-payments represented the largest component (20%) of the out-of-pocket payments.

CONCLUSION. Pathological gambling and co-occurring mental health and substance use disorders pose a significant economic burden to patients, third-party payers and the healthcare system at large. Study findings may assist health care providers, payers and other stakeholders in better understanding the economic burden of mental health and substance use disorders.

² Accepted for oral presentation at the 2017 Annual Meeting & Expo of the American Public Health Association, November 2017 in Atlanta, GA. Manuscript under review at *Journal of Addiction Medicine*.

Patron and License Plate Surveys: Plainridge Park Casino 2016

Patron Survey

The first patron survey at Plainridge Park Casino was carried out in 2016. This survey and future iterations provide the only data collected directly from casino patrons regarding their geographic origin and expenditures. These data are important to ascertain the influx of new revenues to the venue and the Commonwealth and to measure monies diverted from other sectors of the economy. Data is also collected on patrons' perceptions and experience in the new venue and awareness and impact of the GameSense Program. A concurrent license plate survey assesses the accuracy of prior estimates of out-of-state casino expenditure and provides corroborating information about patron origins.

The timing of the survey and the specific sampling periods were chosen so as to obtain as representative a sample of patrons as possible. Data collection was split between winter and summer to take account of potential seasonal differences in patronage. Each data collection period was spread over a two-week period and sampled peak and non-peak days as well peak and non-peak hours. Each site visit lasted 4 hours and every 6th exiting patron was invited to participate. The surveyors approached a total of 2,136 patrons and questionnaires were completed by 479 patrons, representing a response rate of 22%. Since surveyors collected demographic information (gender, age, ethnicity) on all patrons who were approached, it was possible to weight the achieved sample to represent the total population of casino patrons during the survey periods.

While results of the patron survey are still being finalized, a few trends are clear. The majority of patrons were from Massachusetts, with most coming from other communities in Massachusetts rather than Plainville or MGC-designated surrounding communities. Overall, the patrons were older, White, educated, and employed with annual household incomes between \$50,000 and \$100,000. About one-third of the patrons reported visiting the casino several times a month and another third reported visiting once a week or more. A majority of patrons reported having an enjoyable experience at the venue with more than half indicating that gambling was their favorite aspect of their visit. Most patrons played the slot machines with much smaller proportions playing electronic table games, betting on horse racing, and playing the lottery. Nearly all of the patrons had visited casinos in other jurisdictions in the past year, predominantly those in Connecticut and Rhode Island.

Two important economic impacts are "recaptured" spending by Massachusetts residents who would otherwise have spent their money at an out-of-state casino and "reallocated" spending by Massachusetts residents from other businesses in the Commonwealth to Plainridge Park Casino. Based on the patron survey, it is clear that Massachusetts residents account for the majority of all gambling and non-gambling expenditure in the casino. Expenditure data from the casino patrons was used to inform the subsequent economic modeling that is presented in a separate Plainridge Park Casino operations report.

License Plate Survey

The License Plate Survey tested how well the Patron Survey performed in relation to a simpler and less expensive method for estimating casino patron origin and spending. In addition, although employing a somewhat different methodology, this exercise provides some indication of the accuracy of prior estimates of out-of-state casino expenditure reported by the Northeastern Gaming Research Project (NEGRP) biennially from 2004-2014. The results of our License Plate Survey closely approximate the

Patron Survey in estimating geographic origin of the overall patronage as well as the percentage of revenue accounted for by in-state versus out-of-state residents. Furthermore, the results provide support for prior NEGRP estimates of out-of-state Massachusetts casino expenditure.

Plainridge Park Casino First Year of Operation: Economic Impacts

Since Plainridge Park Casino (PPC) began operations in June of 2015, the University of Massachusetts Donahue Institute (UMDI) has worked with PPC and the MGC to obtain data on employment, wages, spending and government revenue related to the operation of the casino. Primary data provided directly by PPC to the UMDI team included employment counts, wages paid and detailed vendor spending. Other data, such as information on the collection and disbursement of taxes derived from PPC's gross gaming revenue, was obtained from state government sources. Finally, UMDI assisted in designing the patron survey that was administered on-site to assess patron behavior and spending patterns.

For this and future economic analyses, the SEIGMA team chose the PI⁺ model from Massachusetts-based Regional Economic Models, Inc. (REMI). PI⁺ generates realistic year-by-year estimates of the total regional effects of specific initiatives. Model simulations using PI⁺ allow users to estimate comprehensive economic and demographic effects created by economic events such as the development and operation of a casino within a region. The REMI model purchased by SEIGMA is a 6 region, 70 sector model. For this study, PI⁺ used the information described above to produce economic impact estimates. These inputs allow for the appropriate allocation of economic activity across the regions of the Commonwealth so that the model can calculate the total economic impacts for the state and show how activity in one region impacts others. The detail and specificity of the data provided to UMDI allowed the modelers to replace some of the default assumptions of the model with project-specific information.

Results of the economic modeling exercise fall into four areas: (1) employment and wages; (2) vendor spending and taxes; (3) public sector impacts from gross gaming revenue; and (4) changes in consumer spending derived from patrons and their spending patterns. Based on the data and their economic modeling, UMDI estimates that the majority of spending at PPC in its first year of operation came from Massachusetts residents who, in the absence of PPC, would have spent their money gambling at an out-of-state casino. Another quarter of total on-site spending came from Massachusetts residents who otherwise would have spent their money elsewhere in Massachusetts. The vast majority of this economic activity occurred in the Metro Boston region, which includes Plainville, although most regions of Massachusetts experienced some positive economic impacts from PPC.

Massachusetts Gambling Impact Cohort (MAGIC) Study

The Massachusetts Gambling Impact Cohort (MAGIC) study was launched in December 2014. While the study builds on lessons learned in gambling cohort studies conducted internationally, MAGIC is the first large longitudinal cohort study of gambling and problem gambling in the U.S. Since the change in gambling availability in Massachusetts during this study will be more dramatic than in other jurisdictions where cohort studies have been conducted, we have the opportunity to learn more about the role of increased gambling availability in the development of problem gambling.

The goals of this multi-year cohort study are to: (1) determine the incidence (new cases) of problem gambling in Massachusetts pre- and post-expanded gambling and (2) provide etiological information on how problem gambling develops, progresses, and remits over time in order to highlight risk and protective factors important in developing effective prevention, intervention, treatment, and recovery support services.

The MAGIC study follows a group of people (i.e., a cohort) with a shared experience (exposure to expanded gaming) at intervals over time. The MAGIC cohort is a subset of participants from the 2013-2014 Baseline General Population Survey (BGPS) carried out for the SEIGMA study. The cohort was established via a stratified sample of 4,860 adult residents of Massachusetts from the BGPS's 9,578 respondents. The sample was selected from five high-risk and one low-risk strata:

- Problem Gamblers
- At-Risk Gamblers
- gamblers who spent \$1,200 or more annually on gambling
- those who gambled weekly
- those who had served in the military since September 2001
- a randomly selected third of the remaining respondents from the BGPS

Between March and September 2015, questionnaires were completed by 3,139 respondents, resulting in a response rate of 65%. Findings from this wave of the study have been written up and the report is presently under review.

The next wave of data collection for MAGIC launched in April 2016. The questionnaire for this wave of the study was expanded to more comprehensively capture etiological factors. Data from this wave of the study is now being cleaned and prepared for analysis. The next wave of data collection for MAGIC is planned to launch in March 2018. During the hiatus between the 2016 and 2018 waves of the study, we have completed several cohort maintenance activities (letters, cards, etc.) and plan additional such activities to minimize attrition and to update contact information for the cohort.

Future analytic directions in MAGIC include deeper analyses of the demographic and socio-economic factors influencing incidence and transitions into and out of problem gambling. We are also interested in whether involvement with specific types of gambling in previous waves predicts problem gambling status in subsequent waves. Finally, we intend to explore whether there are systematic differences between the BGPS respondents who agreed to participate in MAGIC and those who were drawn for the sample but chose not to participate. This will illuminate potential biasing of the results if these variables are related to outcomes, such as problem gambling incidence.

2017 Community Mitigation Fund



What you need to know

- ★ The Expanded Gaming Act created the Community Mitigation Fund to help entities offset costs related to the construction and operation of a gaming establishment.
- ★ The Massachusetts Gaming Commission recently voted on the FY 18 Community Mitigation Fund applications, which were due **February 1, 2017.**
- ★ The Community Mitigation Fund may be used to offset costs related to both Category 1 resort-casino facilities (MGM Springfield and Wynn Boston Harbor) and the state's Category 2 slots-only facility (Plainridge Park Casino).

About the 2017 Community Mitigation Fund

The application period for the 2017 Community Mitigation Fund is now closed.

As part of the effort to help offset impacts that may result from the development and operation of gaming facilities in the Commonwealth, the Massachusetts Legislature created the Community Mitigation Fund as part of the Expanded Gaming Act. Pursuant to the Act, applications for funds are annually due in the beginning of February [February 1, 2018].

Over the next few years while the gaming facilities are being constructed and particularly when the facilities are operational, the Community Mitigation Fund will play a pivotal role in helping communities and others address impacts. The Commission looks forward to an ongoing dialogue with communities and other interested parties regarding the use of these funds in the future. Once Category 1 (full casino) facilities are operational, significant new funds will be deposited annually into the Community Mitigation Fund. However, at least through 2018, the Community Mitigation Fund will need to rely on one-time funds deposited by gaming licensees as part of their gaming license fees.

2017 Funds for Mitigation of Specific Impacts

The 2017 Community Mitigation Fund for mitigation of specific impacts may be used only to mitigate impacts that either have occurred or are occurring as of the February 1, 2017 application date. The 2017 Community Mitigation Fund is available only to mitigate impacts related to the construction of Category 1 gaming facilities and is not intended to fund the mitigation of specific impacts already being funded in a host or surrounding Community Agreement. For entities impacted by the Category 2 Plainridge Park Casino facility, the Commission will make available up to \$500,000 in total for applications for the mitigation of operational or construction impacts.

2017 Transportation Planning Grant

The 2017 Community Mitigation Fund program also authorizes communities to apply for a 2017 Transportation Planning Grant. The communities that are eligible to receive funding from the Community Mitigation Fund are those in Regions A & B and for the Category 2 facility, including each Category 1 and Category 2 host community and each designated surrounding community, each community which entered into a nearby community agreement with a licensee, and any community that petitioned to be a surrounding community to a gaming licensee, and each community that is geographically adjacent to a host community.

Workforce Development Pilot Program in Region A and Region B

The Commission will also make available funding for certain career pathways workforce development pilot programs (Workforce Development Pilot Program Grant) in Regions A and B for service to residents of communities of such Regions, including each Category 1 host community and each designated surrounding community, each community which entered into a nearby community agreement with a licensee, any community that petitioned to be a surrounding community to a gaming licensee, and each community that is geographically adjacent to a host community.

Tribal Gaming Technical Assistance Grant

Additionally, the Commission shall make available technical assistance funding to assist in the determination of potential impacts that may be experienced by communities in geographic proximity to the potential Tribal Gaming facility in Taunton. Such funding will only be made available, after approval of any application by the Southeast Regional Planning & Economic Development District or a comparable regional entity, if it is determined by the Commission that construction of such gaming facility will likely commence prior to or during Fiscal Year 2018.

Reauthorization of the 2015/2016 Reserves

One-time Reserves In order to access funding from the Community Mitigation Reserve Fund, communities are required to submit an application describing the anticipated use and receive Commission approval. This reserve can be used to cover impacts that may arise in 2017 or thereafter. It may also be used for planning, either to determine how to achieve further benefits from a facility or to avoid or minimize any adverse impacts. Reserve applications are not required to be filed by the February 2017 deadline.

MEMBERSHIP OF GAMING POLICY ADVISORY COMMITTEES



GAMING POLICY ADVISORY COMMITTEE

The Gaming Policy Advisory Committee is comprised of the Commission chair, Governor's designee as chair, 2 members of the Senate, 2 members of the House, the Commissioner of the Dept. of Public Health or designee, and 8 persons appointed by the Governor (3 gaming licensees, a federally recognized Indian tribe, organized labor, and 3 from the vicinity of each gaming establishment (host and surrounding communities)).

COMMUNITY MITIGATION ADVISORY SUBCOMMITTEE

The Community Mitigation Advisory Subcommittee is comprised of members from each host community, a Commission representative, a Department of Revenue representative, a Massachusetts Municipal Association, one member from each local community mitigation advisory committee and three appointed by the Governor: (i) a community mitigation professional; (ii) a host community small business owner; and (iii) a chamber of commerce member.

LOCAL COMMUNITY
MITIGATION ADVISORY
COMMITTEE
REGION A - EVERETT

LOCAL COMMUNITY
MITIGATION ADVISORY
COMMITTEE
REGION B - SPRINGFIELD

LOCAL COMMUNITY
MITIGATION ADVISORY
COMMITTEE
REGION C -

Each local committee is comprised of a representative from each host and surrounding community, each RPA region, and four Commission appointees from the region (a representative from a Chamber of Commerce, an economic development organization and 2 human service providers). Each local committee shall annually elect 1 committee member from those members appointed by surrounding community to represent the local committee in the subcommittee on community mitigation.

ROLES OF GAMING POLICY ADVISORY COMMITTEES



The Committee shall designate subcommittees to examine community mitigation, compulsive gambling, and gaming impacts on cultural facilities and tourism. The Committee shall meet at least once annually for the purpose of discussing matters of gaming policy. The Committee shall advise the Commission on the development of its annual gaming research agenda.

COMMUNITY MITIGATION ADVISORY SUBCOMMITTEE

The Subcommittee shall develop recommendations to address community mitigation issues including but not limited to how funds may be expended from the Community Mitigation Fund and the impact of gaming establishments on the host and surrounding communities. The Subcommittee will receive input from Local Community Mitigation Advisory Committees; review annually the expenditures of Community Mitigation Funds and propose regulations to the Commission upon which the Subcommittee shall review prior to promulgation.

LOCAL COMMUNITY
MITIGATION ADVISORY
COMMITTEE
REGION A - EVERETT

LOCAL COMMUNITY
MITIGATION ADVISORY
COMMITTEE
REGION B - SPRINGFIELD

LOCAL COMMUNITY
MITIGATION ADVISORY
COMMITTEE
REGION C -

Each Local Community Mitigation Advisory Committee may provide information and develop recommendations for the Community Mitigation Advisory Subcommittee on any issues related to the gaming establishment located in its region including, but not limited to: (i) issues of community mitigation; (ii) ways in which funds may be expended from the Community Mitigation Fund; and (iii) the impact of the gaming establishments on the host and surrounding communities. Additionally, each Local Community Mitigation Advisory Committee may present information to the Commission consistent with the rules of the Commission on any issues related to the gaming establishment located in its region.



M.G.L. c. 23K, Section 58 Public Health Trust Fund

The purpose of the Public Health Trust fund is to assist social service and public health programs dedicated to addressing problems associated with compulsive gambling including, but not limited to, gambling prevention and addiction services, substance abuse services, educational campaigns to mitigate the potential addictive nature of gambling.

Section 58. There is hereby established and set up on the books of the commonwealth a separate fund to be known as the Public Health Trust Fund. The fund shall consist of fees assessed under section 56 and all other monies credited or transferred to the fund from any other source under law. The secretary of health and human services shall be the trustee of the fund and may only expend monies in the fund, without further appropriation, to assist social service and public health programs dedicated to addressing problems associated with compulsive gambling including, but not limited to, gambling prevention and addiction services, substance abuse services, educational campaigns to mitigate the potential addictive nature of gambling and any studies and evaluations necessary, including the annual research agenda under section 71, to ensure the proper and most effective strategies.

M.G.L. c. 23K, Section 61 Community Mitigation Fund

The purpose of the Community Mitigation Fund is to assist the host community and surrounding communities in offsetting costs related to the construction and operation of a gaming establishment including, but not limited to, communities and water and sewer districts in the vicinity of a gaming establishment, local and regional education, transportation, infrastructure, housing, environmental issues and public safety, including the office of the county district attorney, police, fire and emergency services.

<u>Section 61</u>. (a) There shall be established and set up on the books of the commonwealth a separate fund to be known as the Community Mitigation Fund. The fund shall consist of monies transferred under section 59 and all other monies credited or transferred to the fund from any other fund or source.

(b) The commission shall administer the fund and, without further appropriation, shall expend monies in the fund to assist the host community and surrounding communities in offsetting costs related to the construction and operation of a gaming establishment including, but not limited to, communities and water and sewer districts in the vicinity of a gaming establishment, local and regional education, transportation, infrastructure, housing, environmental issues and public safety, including the office of the county district attorney, police, fire and emergency services. The commission may, at its discretion, distribute funds to a governmental entity or district other than a

M.G.L. c. 23K, Section 58 Public Health Trust Fund	M.G.L. c. 23K, Section 61 Community Mitigation Fund
	single municipality in order to implement a mitigation measure that affects more than 1 municipality; provided, however, that such entity or district shall submit a written request for funding in the same manner as a municipality would be required to submit such a request under subsection (c).
	(c) Parties requesting appropriations from the fund shall submit a written request for funding to the commission before February 1 of each year. The commission may hold a public hearing in the region of a gaming establishment to provide parties with the opportunity to provide further information about their request for funds and shall distribute funds to requesting parties based on demonstrated need.